



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 166757

TO: Patricia Duffy
Location: rem/3B05/3C18
Art Unit: 1645
Friday, September 30, 2005
Case Serial Number: 09/770943

From: Barb O'Bryen
Location: Biotech-Chem Library
Remsen 1a69
Phone: 571-272-2518

BOB
barbara.obryen@uspto.gov

Search Notes

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Access DB# 166757-A
167436-STR

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: PATRICK DUFFY Examiner #: 72440 Date: 9/25/05
Art Unit: 1645 Phone Number 30 20855 Serial Number: 09/770,943
Mail Box and Bldg/Room Location: 3C18 3805 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need. me

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: pharmaceutical compositions inhibitors of DNA immunostim
Inventors (please provide full names): Raz, E Roman, M

Earliest Priority Filing Date: 1997

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search the Registry for:

- ① RR[TGAUI][ACGTUI]YY/^{SSSN} AND SQL <= 45
- ② RR I[IG]YY/^{SSSN} AND SQL <= 45
- ③ RR[GI][ACGTUI]YY/^{SSSN} and SQL <= 45

Please cross file Reg ^{results} into HCAPLUS + USPATFULL + restrict output to

I need only documents with {therapeutic or
therapeutic or
pharmaceutical or
pharmaceutical uses}

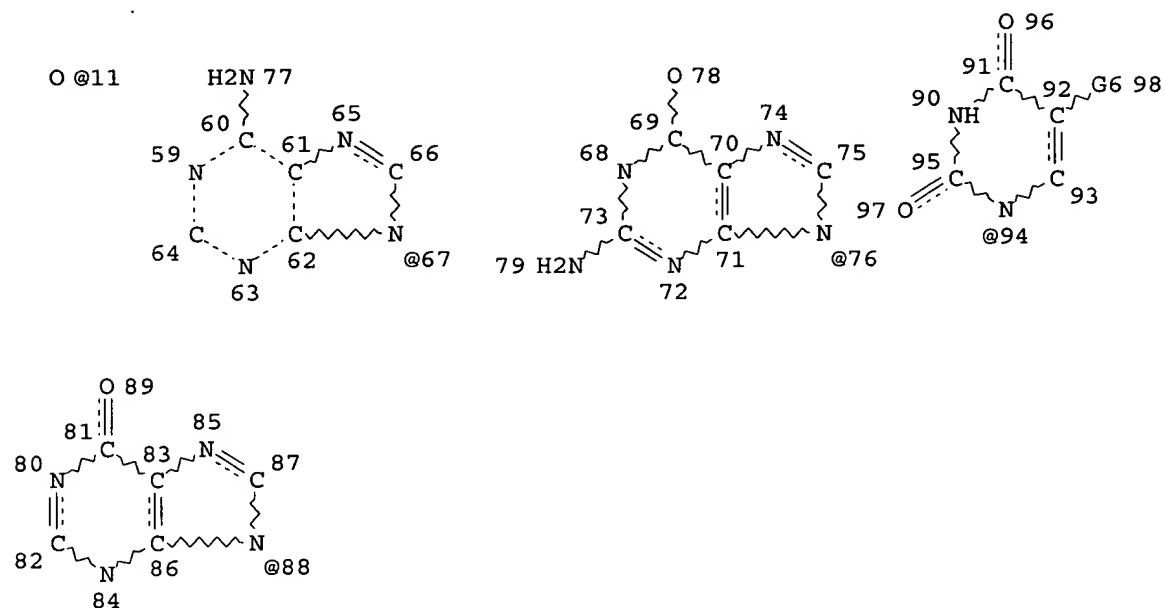
I need documents whose publication year is
< 1997

-Thank you - Pat Duffy

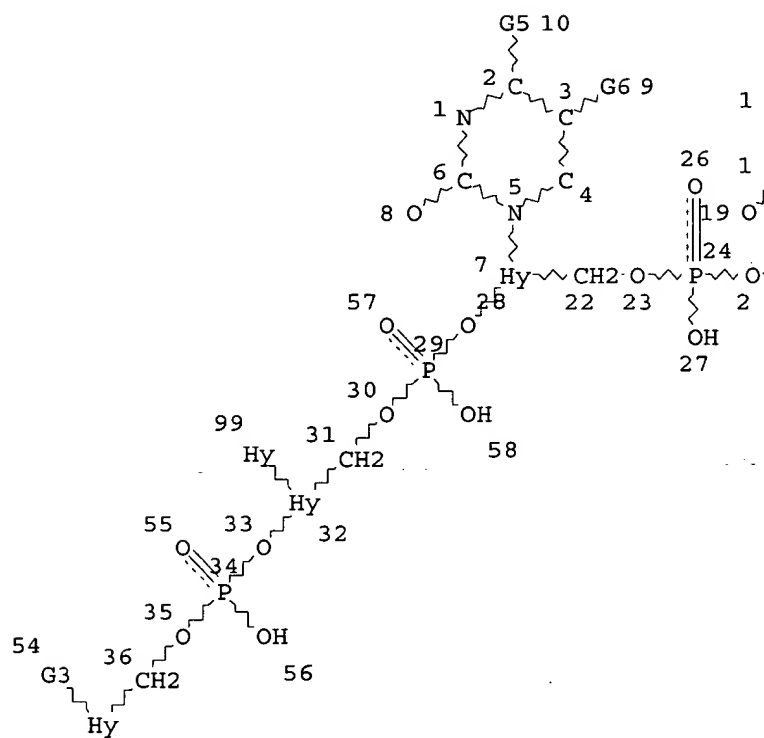
| STAFF USE ONLY | | Type of Search | Vendors and cost where applicable |
|---|--------------------------|--------------------------|-----------------------------------|
| Searcher: <u>me</u> | NA Sequence (#) <u>1</u> | STN <u>409 / str 450</u> | |
| Searcher Phone #: _____ | AA Sequence (#) _____ | Dialog _____ | |
| Searcher Location: _____ | Structure (#) <u>1</u> | Questel/Orbit _____ | |
| Date Searcher Picked Up: <u>9-28</u> | Bibliographic _____ | Dr.Link _____ | |
| Date Completed: <u>9-28-05</u> | Litigation _____ | Lexis/Nexis _____ | |
| Searcher Prep & Review Time: <u>2:00</u> <u>str</u> | Fulltext _____ | Sequence Systems _____ | |
| Clerical Prep Time: _____ | Patent Family _____ | WWW/Internet _____ | |
| Online Time: <u>3:00</u> <u>str</u> | Other _____ | Other (specify) _____ | |

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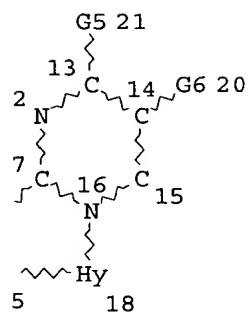
=> d stat que 122; d his full
L20 STR



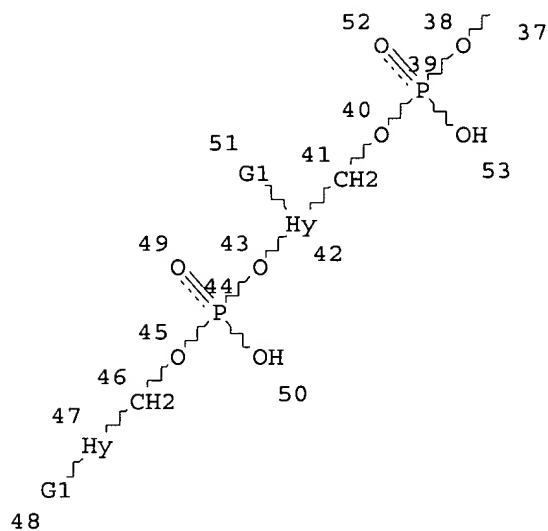
Page 1-A



Page 2-A



Page 2-B



Page 3-A

VAR G1=67/76

VAR G3=67/76/88/94

VAR G5=11/NH

VAR G6=H/ME

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1

CONNECT IS E1 RC AT 8

CONNECT IS E1 RC AT 11

CONNECT IS E2 RC AT 12

CONNECT IS E1 RC AT 19

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY LOQ SAT AT 7

GGCAT IS MCY LOQ SAT AT 18

GGCAT IS MCY LOQ SAT AT 32

GGCAT IS MCY LOC SAT AT 37

GGCAT IS MCY LOC SAT AT 42

GGCAT IS MCY LOC SAT AT 47

GGCAT IS UNS AT 99

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E1 O AT 7

ECOUNT IS E1 O AT 18

ECOUNT IS E1 O AT 32

ECOUNT IS E1 O AT 37

ECOUNT IS E1 O AT 42
ECOUNT IS E1 O AT 47
ECOUNT IS M2 N AT 99

GRAPH ATTRIBUTES:

RSPEC 12 5
NUMBER OF NODES IS 99

STEREO ATTRIBUTES: NONE

L22 2568 SEA FILE=REGISTRY SSS FUL L20

100.0% PROCESSED 25240 ITERATIONS
SEARCH TIME: 00.00.11

2568 ANSWERS

(FILE 'HOME' ENTERED AT 12:20:06 ON 30 SEP 2005)

FILE 'LREGISTRY' ENTERED AT 12:20:12 ON 30 SEP 2005

L1 69 SEA ABB=ON RR[TGAUI] [ACGTUI]YY|RRI [IG]YY|RR [GI] [ACGTUI]YY/SQSN

FILE 'STNGUIDE' ENTERED AT 12:21:48 ON 30 SEP 2005

FILE 'REGISTRY' ENTERED AT 12:25:13 ON 30 SEP 2005

FILE 'LREGISTRY' ENTERED AT 12:25:17 ON 30 SEP 2005

L2 0 SEA ABB=ON I/SQSN
L3 79 SEA ABB=ON INOSINE
L4 0 SEA ABB=ON L3 AND NS/FS
E NS/FS
D KWIC L3 1-5
D L3 1-5

FILE 'CAPLUS' ENTERED AT 12:37:52 ON 30 SEP 2005

SET LINE 250
SET DETAIL OFF
E US2000-770943/AP, PRN 25
E US2001-770943/AP, PRN 25
SET NOTICE 1000 SEARCH
L5 3 SEA ABB=ON US2001-770943/AP
SET NOTICE LOGIN SEARCH
SET LINE LOGIN
SET DETAIL LOGIN
D SCAN
SEL RN

FILE 'REGISTRY' ENTERED AT 12:38:55 ON 30 SEP 2005

L6 97 SEA ABB=ON (217312-57-7/BI OR 217312-58-8/BI OR 217312-59-9/BI
OR 217312-60-2/BI OR 127437-18-7/BI OR 132194-16-2/BI OR
141185-26-4/BI OR 141185-27-5/BI OR 184024-78-0/BI OR 206654-99
-1/BI OR 206655-00-7/BI OR 206655-01-8/BI OR 206655-02-9/BI OR
206655-03-0/BI OR 206655-04-1/BI OR 206655-05-2/BI OR 206655-06
-3/BI OR 206655-08-5/BI OR 206655-09-6/BI OR 211096-26-3/BI OR
217439-38-8/BI OR 217439-39-9/BI OR 217439-40-2/BI OR 217439-42
-4/BI OR 217439-43-5/BI OR 217439-44-6/BI OR 217439-45-7/BI OR
217439-46-8/BI OR 217439-47-9/BI OR 217447-23-9/BI OR 217447-24
-0/BI OR 217447-25-1/BI OR 217447-26-2/BI OR 217447-27-3/BI OR

217638-04-5/BI OR 217638-05-6/BI OR 217638-06-7/BI OR 2240-25-7
/BI OR 251901-47-0/BI OR 251901-49-2/BI OR 251901-50-5/BI OR
264875-63-0/BI OR 264875-64-1/BI OR 264875-65-2/BI OR 264875-66
-3/BI OR 264875-67-4/BI OR 264875-68-5/BI OR 264875-69-6/BI OR
264875-70-9/BI OR 264875-71-0/BI OR 264875-72-1/BI OR 264875-73
-2/BI OR 264875-74-3/BI OR 264875-75-4/BI OR 264875-76-5/BI OR
264875-77-6/BI OR 264875-78-7/BI OR 264875-79-8/BI OR 264875-80
-1/BI OR 264875-81-2/BI OR 264875-82-3/BI OR 264875-83-4/BI OR
264875-84-5/BI OR 264875-86-7/BI OR 264875-87-8/BI OR 264875-88
-9/BI OR 264875-89-0/BI OR 264875-90-3/BI OR 552901-86-7/BI OR
552901-87-8/BI OR 552901-88-9/BI OR 552901-89-0/BI OR 552901-90
-3/BI OR 552901-91-4/BI OR 552901-92-5/BI OR 552901-93-6/BI OR
554461-69-7/BI OR 554461-70-0/BI OR 554461-71-1/BI OR 554461-72
-2/BI OR 554461-73-3/BI OR 554461-74-4/BI OR 554461-75-5/BI OR
554461-76-6/BI OR 554461-77-7/BI OR 554461-78-8/BI OR 554461-79
-9/BI OR 554461-80-2/BI OR 554461-81-3/BI OR 71-30-7/BI OR
75586-90-2/BI OR 82855-46-7/BI OR 82870-55-1/BI OR 82870-56-2/B
I OR 83026-06-6/BI OR 94854-97-4/BI OR 94855-02-4/BI)
D SCAN

FILE 'STNGUIDE' ENTERED AT 12:39:25 ON 30 SEP 2005

FILE 'REGISTRY' ENTERED AT 12:40:13 ON 30 SEP 2005

L7 0 SEA ABB=ON L6 AND ?INOSIN?
L8 0 SEA ABB=ON L6 AND DEOXYINOSIN?

FILE 'STNGUIDE' ENTERED AT 12:40:42 ON 30 SEP 2005

FILE 'REGISTRY' ENTERED AT 12:51:28 ON 30 SEP 2005

L9 6618 SEA ABB=ON INOSIN? OR DEOXYINOSIN?
L10 494 SEA ABB=ON L9 AND NS/FS
L11 35 SEA ABB=ON L10 AND 17/SQL
L12 34 SEA ABB=ON L11 NOT RSD/FA
D SQIDE
E GIG/SQEN

FILE 'STNGUIDE' ENTERED AT 12:54:41 ON 30 SEP 2005

FILE 'LREGISTRY' ENTERED AT 12:55:42 ON 30 SEP 2005

L13 69 SEA ABB=ON RR[TGAUI][ACGTUI]YY/SQSN

FILE 'STNGUIDE' ENTERED AT 12:56:37 ON 30 SEP 2005

FILE 'REGISTRY' ENTERED AT 13:07:09 ON 30 SEP 2005

E 1/SQL
L14 6113380 SEA ABB=ON SQL<46 AND NS/FS
L15 1667 SEA ABB=ON RRI[IG]YY/SQSN
L16 1612 SEA ABB=ON L14 AND L15
SAVE TEMP L16 DUF943SEQ1/A
L*** DEL STR
L17 STR
SAVE TEMP L17 DUF943STR/Q
L18 STR L17
SAVE TEMP L18 DUF943STR/Q
L19 0 SEA SSS SAM L18

FILE 'STNGUIDE' ENTERED AT 13:55:07 ON 30 SEP 2005

D QUE L18

FILE 'REGISTRY' ENTERED AT 14:03:46 ON 30 SEP 2005

L20 STR L18
L21 50 SEA SSS SAM L20
L22 2568 SEA SSS FUL L20
SAVE TEMP L22 DUF943FULL/A

FILE 'CAPLUS' ENTERED AT 14:05:34 ON 30 SEP 2005
L23 166 SEA ABB=ON L16
L24 1716 SEA ABB=ON L22
L25 1073 SEA ABB=ON (L23 OR L24) NOT P/DT
L26 834 SEA ABB=ON L25 NOT PY>1997
L27 802 SEA ABB=ON (L23 OR L24) NOT L25
E 1994/AY
L28 173 SEA ABB=ON L27 NOT AY>1997
L29 1007 SEA ABB=ON L26 OR L28
L30 146 SEA ABB=ON (L23 OR L24) (L) (THU OR BAC OR PAC OR PKT OR
DMA)/RL
L31 383 SEA ABB=ON (L23 OR L24) AND PHARMAC?/SC,SX
L32 134 SEA ABB=ON (L30 OR L31) AND L29
D SCAN L5
L33 55668 SEA ABB=ON (IMMUNOSTIM? OR IMMUNOMOD? OR IMMUNOSUPPRES?)/CW
L34 50 SEA ABB=ON L31 AND L33
L35 51 SEA ABB=ON (L30 OR L34) AND L29

FILE 'USPATFULL' ENTERED AT 14:10:23 ON 30 SEP 2005
L36 639 SEA ABB=ON L16 OR L22
L37 185 SEA ABB=ON L36 NOT AY>1997
L38 10501 SEA ABB=ON (IMMUNOSTIM? OR IMMUNOMOD? OR IMMUNOSUPPRES?)/IT
L39 8 SEA ABB=ON L37 AND L38
L40 64 SEA ABB=ON L36 (L) (PHARMAC? OR THERAP?)/IT
L41 13 SEA ABB=ON L37 AND L40
L42 16 SEA ABB=ON L39 OR L41

FILE 'STNGUIDE' ENTERED AT 14:12:01 ON 30 SEP 2005

FILE 'REGISTRY' ENTERED AT 14:12:15 ON 30 SEP 2005
D QUE L14
D QUE L16
D STAT QUE L22

FILE 'CAPLUS' ENTERED AT 14:15:02 ON 30 SEP 2005
D QUE NOS L35

FILE 'USPATFULL' ENTERED AT 14:15:02 ON 30 SEP 2005
D QUE NOS L42

FILE 'CAPLUS, USPATFULL' ENTERED AT 14:15:08 ON 30 SEP 2005
L43 63 DUP REM L35 L42 (4 DUPLICATES REMOVED)
ANSWERS '1-47' FROM FILE CAPLUS
ANSWERS '48-63' FROM FILE USPATFULL

FILE 'STNGUIDE' ENTERED AT 14:15:42 ON 30 SEP 2005

FILE 'CAPLUS' ENTERED AT 14:17:15 ON 30 SEP 2005
D QUE NOS L35
L44 37 SEA ABB=ON L35 AND L24

FILE 'USPATFULL' ENTERED AT 14:17:29 ON 30 SEP 2005
D QUE NOS L42
L45 16 SEA ABB=ON L42 AND L22

L46 FILE 'CAPLUS, USPATFULL' ENTERED AT 14:17:46 ON 30 SEP 2005
53 DUP REM L44 L45 (0 DUPLICATES REMOVED)
ANSWERS '1-37' FROM FILE CAPLUS
ANSWERS '38-53' FROM FILE USPATFULL
D IBIB ED ABS HITSTR 1-53

FILE 'CAPLUS' ENTERED AT 14:18:57 ON 30 SEP 2005
D QUE NOS L35
L47 14 SEA ABB=ON (L35 AND L23) NOT L44

FILE 'USPATFULL' ENTERED AT 14:19:24 ON 30 SEP 2005
D QUE NOS L42
L48 0 SEA ABB=ON (L42 AND L16) NOT L45

FILE 'CAPLUS' ENTERED AT 14:19:56 ON 30 SEP 2005
D IBIB ED ABS HITSEQ L47 1
D IBIB ED ABS HITSEQ L47 2-14

FILE 'HOME' ENTERED AT 14:20:59 ON 30 SEP 2005
D SAVED
D STAT QUE L22

FILE HOME

FILE LREGISTRY
LREGISTRY IS A STATIC LEARNING FILE

NEW CAS INFORMATION USE POLICIES, ENTER HELP USAGETERMS FOR DETAILS.

FILE STNGUIDE
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 23, 2005 (20050923/UP).

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 29 SEP 2005 HIGHEST RN 864227-43-0
DICTIONARY FILE UPDATES: 29 SEP 2005 HIGHEST RN 864227-43-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE CAPLUS

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FILE COVERS 1907 - 30 Sep 2005 VOL 143 ISS 15
FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Sep 2005 (20050929/PD)
FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)
HIGHEST GRANTED PATENT NUMBER: US6951031
HIGHEST APPLICATION PUBLICATION NUMBER: US2005217002
CA INDEXING IS CURRENT THROUGH 29 Sep 2005 (20050929/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Sep 2005 (20050929/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

```
>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:09:07 ON 08 AUG 2005

=> f reg

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:09:49 ON 08 AUG 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 7 AUG 2005 HIGHEST RN 858781-12-1

DICTIONARY FILE UPDATES: 7 AUG 2005 HIGHEST RN 858781-12-1

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s RR[TGAUI][ACGTUI]YY/SQSN AND sql<=45

3532138 RR[TGAUI][ACGTUI]YY/SQSN

7175039 SQL<=45

L1 3532138 RR[TGAUI][ACGTUI]YY/SQSN AND SQL<=45

=> s RR[TAU][GI]YY/SQSN AND sql<=45

SYSTEM LIMITS EXCEEDED - SEARCH ENDED

FILE 'HCAPLUS' ENTERED AT 13:21:35 ON 08 AUG 2005

FILE 'REGISTRY' ENTERED AT 13:21:45 ON 08 AUG 2005

L1 15735 S AAGGTT/SQSN AND SQL<=45

FILE 'HCAPLUS' ENTERED AT 13:24:22 ON 08 AUG 2005

L2 3029 S L1

L3 418 S L2 AND PY<=1998

L4 673 S L1 AND (BACTERIA? OR EUBACTERIA OR EUBACTER? OR MICROB?)

L5 111 S L3 AND (BACTERIA? OR EUBACTERIA OR EUBACTER? OR MICROB?)

=> LOGOFF

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:Y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

427.28

540.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-88.33

-88.33

STN INTERNATIONAL LOGOFF AT 13:38:19 ON 08 AUG 2005

=> d his full

(FILE 'HOME' ENTERED AT 14:04:45 ON 04 AUG 2005)

FILE 'REGISTRY' ENTERED AT 14:05:30 ON 04 AUG 2005

L*** DEL 17 RRCGY/SQSP
D SQIDE

L*** DEL 14 RRCGY/SQEN
D SQIDE

L1 198145 SEA ABB=ON PLU=ON RRCGY/SQSN AND SQL<=45

FILE 'HCAPLUS' ENTERED AT 14:11:36 ON 04 AUG 2005

L2 19430 SEA ABB=ON PLU=ON L1

L3 4359 SEA ABB=ON PLU=ON L2 AND (PY<=1997 OR AY<=1997 OR PRY<=1997)

L*** DEL 2052 L3 AND US/PC

L*** DEL 1243 L3 AND US/PC.B
E EUBACTERIA/CT
E E3+OLD,NT1

L4 241 SEA ABB=ON PLU=ON (EUBACTERIA+OLD,NT1/CT OR (EUBACTER? OR
BACTER?)/CW) AND L3

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 3 AUG 2005 HIGHEST RN 858181-56-3

DICTIONARY FILE UPDATES: 3 AUG 2005 HIGHEST RN 858181-56-3

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE HCAPLUS

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FILE COVERS 1907 - 4 Aug 2005 VOL 143 ISS 6

FILE LAST UPDATED: 3 Aug 2005 (20050803/ED)

The search profile you entered was too complex or gave too many answers. Simplify or subdivide the query and try again. If you have exceeded the answer limit, enter DELETE HISTORY at an arrow prompt (=>) to remove all previous answers sets and begin at L1. Use the SAVE command to store any important profiles or answer sets before using DELETE HISTORY.

```
=> DELETE L1
DELETE L1? (Y)/N:Y
'L1' DELETED
```

```
=> s RR[TAU][GI]YY/SQSN AND sql<=45
      1014220 RR[TAU][GI]YY/SQSN
      7175039 SQL<=45
L1      1014220 RR[TAU][GI]YY/SQSN AND SQL<=45
```

```
=> FILE HCAPLUS
COST IN U.S. DOLLARS          SINCE FILE          TOTAL
                               ENTRY              SESSION
FULL ESTIMATED COST          71.51              71.72
```

FILE 'HCAPLUS' ENTERED AT 13:20:15 ON 08 AUG 2005
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FILE COVERS 1907 - 8 Aug 2005 VOL 143 ISS 7
FILE LAST UPDATED: 7 Aug 2005 (20050807/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> S L1
TOO MANY TERMS FOR FILE CROSSOVER IN L1
There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.
```

```
=> S AGGTT/SQSN AND SQL<=45
  REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.
```

SYSTEM LIMITS EXCEEDED - SEARCH ENDED

```
=>
=> DELETE L1
DELETE L1? (Y)/N:Y
'L1' DELETED
```


| | | | | |
|-------------|--------------------|-------------|-------------|--------------------|
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| 692852-99-6 | 692853-00-2 | 692853-01-3 | 692853-02-4 | 692853-03-5 |
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| 692853-94-4 | 692853-95-5 | | | |

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(DNAzyme specific for human KDR VEGFR mRNA; ribozymes for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor)

L3 ANSWER 10 OF 418 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:355661 HCAPLUS
 DN 140:332450
 ED Entered STN: 03 May 2004
 TI Enzymatic nucleic acid-mediated treatment of ocular diseases or conditions related to levels of vascular endothelial growth factor receptor
 IN Pavco, Pamela; McSwiggen, James; Stinchcomb, Dan; Escobedo, Jaime
 PA Ribozyme Pharmaceuticals, Inc., USA
 SO U.S. Pat. Appl. Publ., 357 pp., Cont.-in-part of U.S. Ser. No. 870,161.
 CODEN: USXXCO
 DT Patent
 LA English
 IC A61K048-00; C07H021-04; A61K009-127; C12N015-88
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 (EUBACTERIA OR EUBACTERIAS)
 30497 EUBACTER?
 400100 MICROB?
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FILE 'REGISTRY' ENTERED AT 13:09:49 ON 08 AUG 2005

FILE 'HCAPLUS' ENTERED AT 13:20:15 ON 08 AUG 2005

=> fil reg
FILE 'REGISTRY' ENTERED AT 14:12:15 ON 30 SEP 2005
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 29 SEP 2005 HIGHEST RN 864227-43-0
DICTIONARY FILE UPDATES: 29 SEP 2005 HIGHEST RN 864227-43-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> => s rr[tgauil][acgtui]yy/sqsn
SYSTEM LIMITS EXCEEDED - SEARCH ENDED

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SYSTEM LIMITS EXCEEDED - SEARCH ENDED

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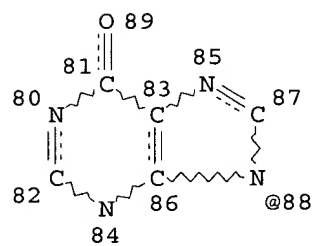
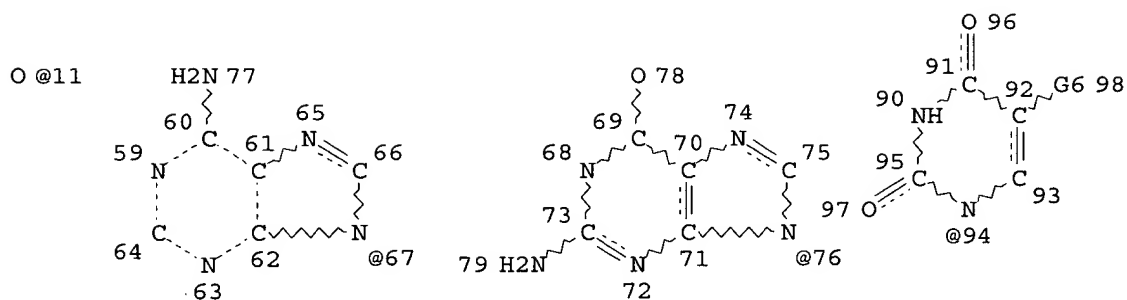
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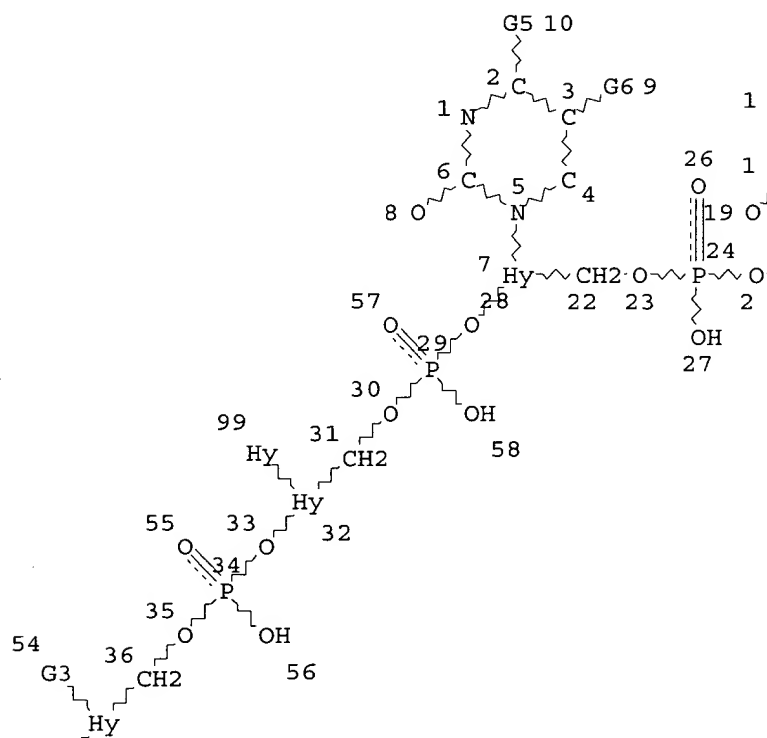
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L16 1612 SEA FILE=REGISTRY ABB=ON L14 AND L15

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specific (narrow) enough
to run*

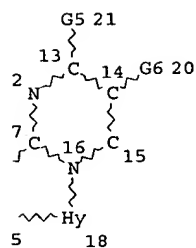
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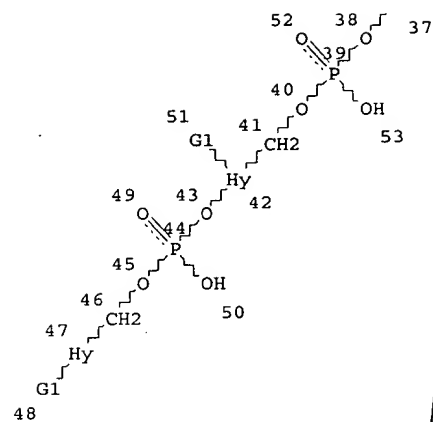
Page 1-A



Page 2-A



Page 2-B



searched structure of
RR [TGAI] [ACGTUI] YY

Hy = heterocycle

Page 3-A

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VAR G3=67/76/88/94

VAR G5=11/NH

VAR G6=H/ME

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CONNECT IS E1 F

CONNECT IS E1 F

CONNECT IS E2 F

CONNECT IS E1 F

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GGCAT IS MCY

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GGCAT IS MCY

GGCAT IS MCY

GGCAT IS UNS

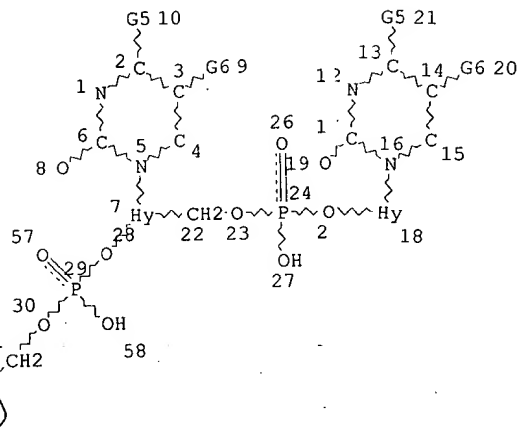
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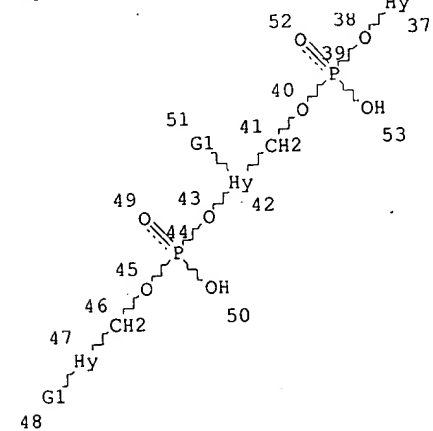
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2-2518

Page 2-B



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 ECOUNT IS M2 N AT 99

GRAPH ATTRIBUTES:

RSPEC 12 5
 NUMBER OF NODES IS 99

STEREO ATTRIBUTES: NONE

L22 2568 SEA FILE=REGISTRY SSS FUL L20

100.0% PROCESSED 25240 ITERATIONS
 SEARCH TIME: 00.00.11

2568 ANSWERS

=> fil capl; d que nos l35

FILE 'CAPLUS' ENTERED AT 14:17:15 ON 30 SEP 2005

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FILE COVERS 1907 - 30 Sep 2005 VOL 143 ISS 15
 FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L14 6113380 SEA FILE=REGISTRY ABB=ON SQL<46 AND NS/FS
 L15 1667 SEA FILE=REGISTRY ABB=ON RRI[IG]YY/SQSN
 L16 1612 SEA FILE=REGISTRY ABB=ON L14 AND L15
 L20 STR
 L22 2568 SEA FILE=REGISTRY SSS FUL L20
 L23 166 SEA FILE=CAPLUS ABB=ON L16
 L24 1716 S
 L25 1073 S
 L26 834 S
 L27 802 SI
 L28 173 SI
 L29 1007 SE
 L30 146 SE
 PK
 L31 383 SE
 L33 55668 SE
 PRI
 L34 50 SEA FILE=
 L35 51 SEA FILE=

THU = Therapeutic use
 BAC = biological activity
 PAC = pharmacologic activity
 PKT = pharmacokinetics
 MA = drug mechanism
 of action

↑
 C OR PAC OR

/SC, SX
 ? OR IMMUNOSUP

version of structure
 for access to view
 fold down

Searched

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=> s l35 and l24

L44 37 L35 AND L24

*structure
sequence search answers*

=> fil uspatf; d que nos l42

FILE 'USPATFULL' ENTERED AT 14:17:29 ON 30 SEP 2005

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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Sep 2005 (20050929/PD)

FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)

HIGHEST GRANTED PATENT NUMBER: US6951031

HIGHEST APPLICATION PUBLICATION NUMBER: US2005217002

CA INDEXING IS CURRENT THROUGH 29 Sep 2005 (20050929/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Sep 2005 (20050929/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

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>>> original, i.e., the earliest published granted patents or  <<<
>>> applications.  USPAT2 contains full text of the latest US  <<<
>>> publications, starting in 2001, for the inventions covered in  <<<
>>> USPATFULL.  A USPATFULL record contains not only the original  <<<
>>> published document but also a list of any subsequent  <<<
>>> publications.  The publication number, patent kind code, and  <<<
>>> publication date for all the US publications for an invention  <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL  <<<
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>>> /PK, etc.  <<<
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>>> enter this cluster.  <<<
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>>> Use USPATALL when searching terms such as patent assignees,  <<<
>>> classifications, or claims, that may potentially change from  <<<
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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L16 1612 SEA FILE=REGISTRY ABB=ON L14 AND L15
L20 STR
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IMMUNOSUPPRES?)/IT
L39 8 SEA FILE=USPATFULL ABB=ON L37 AND L38
L40 64 SEA FILE=USPATFULL ABB=ON L36(L) (PHARMAC? OR THERAP?)/IT
L41 13 SEA FILE=USPATFULL ABB=ON L37 AND L40
L42 16 SEA FILE=USPATFULL ABB=ON L39 OR L41
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568 L22
L45 16 L42 AND L22

sequence structure search answers

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PROCESSING COMPLETED FOR L44

PROCESSING COMPLETED FOR L45

L46 53 DUP REM L44 L45 (0 DUPLICATES REMOVED)

ANSWERS '1-37' FROM FILE CAPLUS

ANSWERS '38-53' FROM FILE USPATFULL

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L46 ANSWER 1 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:488123 CAPLUS

DOCUMENT NUMBER: 137:73234

TITLE: Oligonucleotides specific for hepatitis C virus treatment

INVENTOR(S): Kilkuskie, Robert L.; Frank, Bruce L.; Goodchild, John; Wolfe, Jia L.; Roberts, Peter C.; Hamlin, Henry A.; Roberts, Noel A.; Walther, Debra M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 74 pp., Cont.-in-part of U.S. Ser. No. 471,968.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2002081577 | A1 | 20020627 | US 1997-887505 | 19970702 |
| EP 1331267 | A2 | 20030730 | EP 2003-5364 | 19960604 |
| EP 1331267 | A3 | 20031203 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

| | | |
|------------------------|----------------|-------------|
| PRIORITY APPLN. INFO.: | US 1995-471968 | A2 19950606 |
| | US 1996-21104P | P 19960702 |
| | EP 1996-920788 | A3 19960604 |

ED Entered STN: 28 Jun 2002

AB The invention discloses synthetic oligonucleotides complementary to contiguous and non-contiguous regions of the HCV RNA. Also disclosed are methods and kits for inhibiting the replication of HCV, inhibiting the expression of HCV nucleic acid and protein, and for treating HCV infections.

IT 185946-81-0

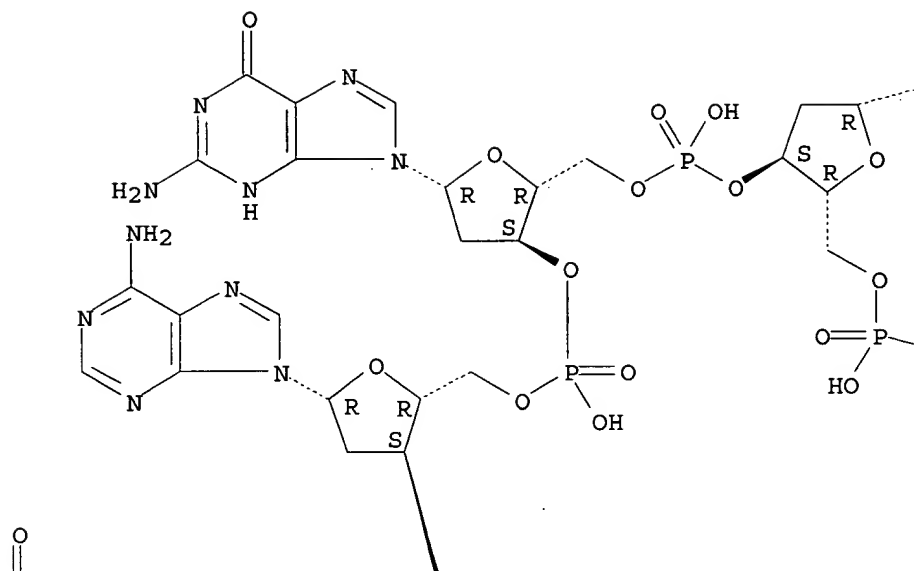
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligonucleotides specific for hepatitis C virus treatment)

RN 185946-81-0 CAPLUS

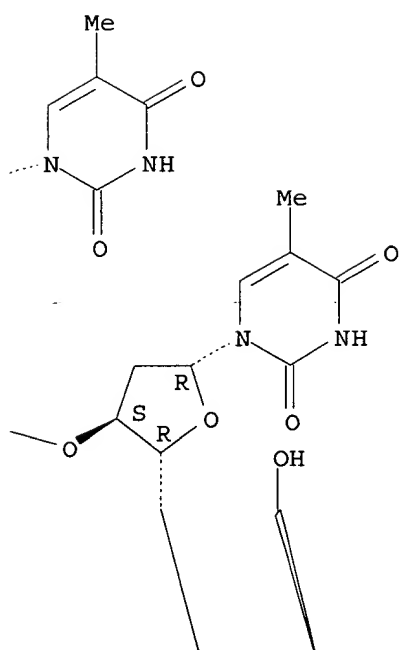
CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

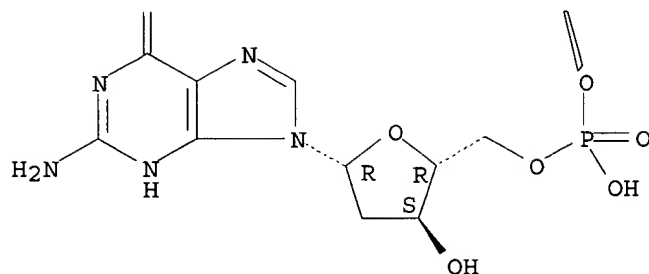
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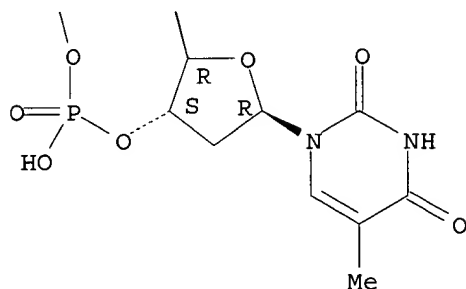
PAGE 1-B



PAGE 2-A



PAGE 2-B



L46 ANSWER 2 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:479637 CAPLUS

DOCUMENT NUMBER: 129:91399

TITLE: Methods for detecting and inhibiting the RNA component of telomerase with antisense oligonucleotides and clinical use

INVENTOR(S): Kim, Nam Woo; Wu, Fred; Kealey, James T.; Pruzan, Ronald; Weinrich, Scott L.

PATENT ASSIGNEE(S): Geron Corp., USA

SOURCE: PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9828442 | A1 | 19980702 | WO 1997-US23619 | 19971219 |
| W: AU, CA, JP, MX | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5846723 | A | 19981208 | US 1996-770565 | 19961220 |
| CA 2274586 | AA | 19980702 | CA 1997-2274586 | 19971219 |
| AU 9856148 | A1 | 19980717 | AU 1998-56148 | 19971219 |
| AU 733610 | B2 | 20010517 | | |
| EP 951568 | A1 | 19991027 | EP 1997-952568 | 19971219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2001507229 | T2 | 20010605 | JP 1998-529003 | 19971219 |
| PRIORITY APPLN. INFO.: | | | US 1996-770564 | A 19961220 |

US 1996-770565
WO 1997-US23619A 19961220
W 19971219

ED Entered STN: 03 Aug 1998

AB Disclosed are methods of using the oligonucleotide for detecting the RNA component of telomerase, diagnosing cancer, determining its prognosis, and inhibiting telomerase activity using polynucleotides that hybridize to the RNA component of mammalian telomerase. Also provided are antisense oligonucleotides specifically hybridize to nucleotide residues 137-196, 290-319, and 350-380 of the cDNA (SEQ. ID 1) encoding human telomerase, and the primers for determination of the RNA component in human telomerase. Pharmaceutical composition containing expression vectors for the antisense oligonucleotides is also claimed.

IT 209627-13-4P

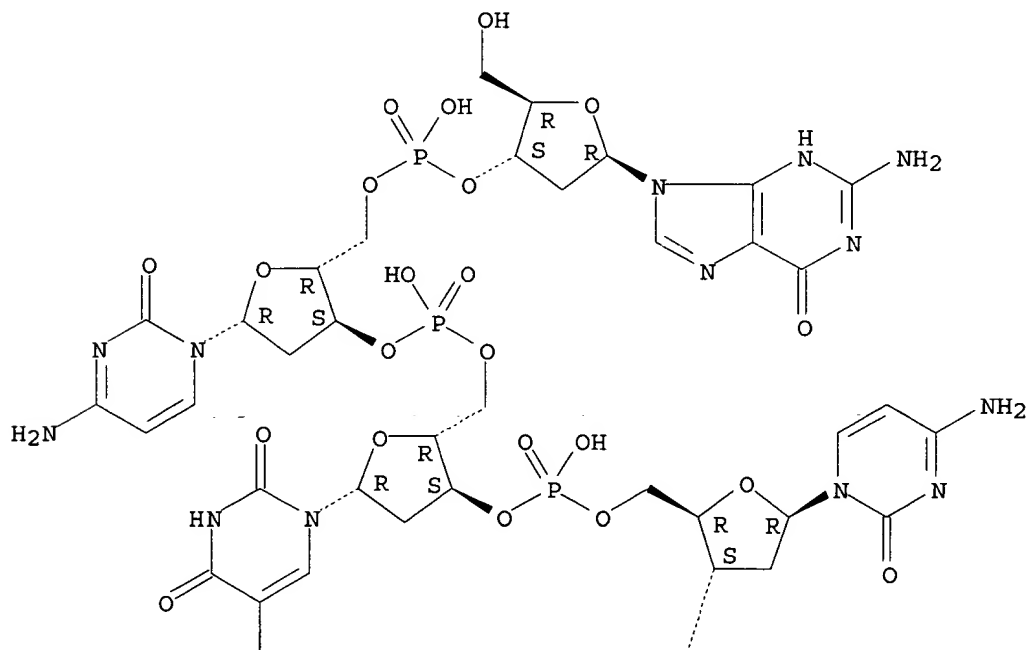
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; antisense oligonucleotide for detecting and inhibiting RNA component of human telomerase and clin. use)

RN 209627-13-4 CAPLUS

CN Guanosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

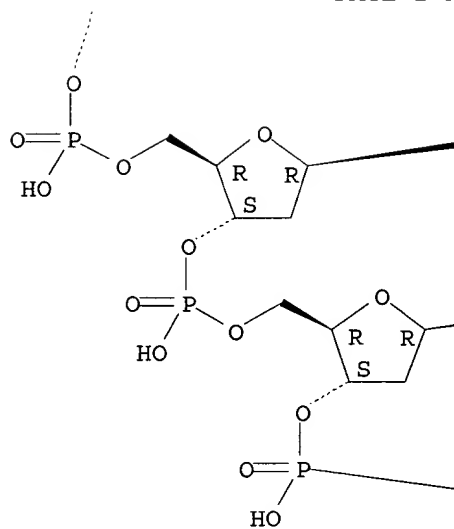


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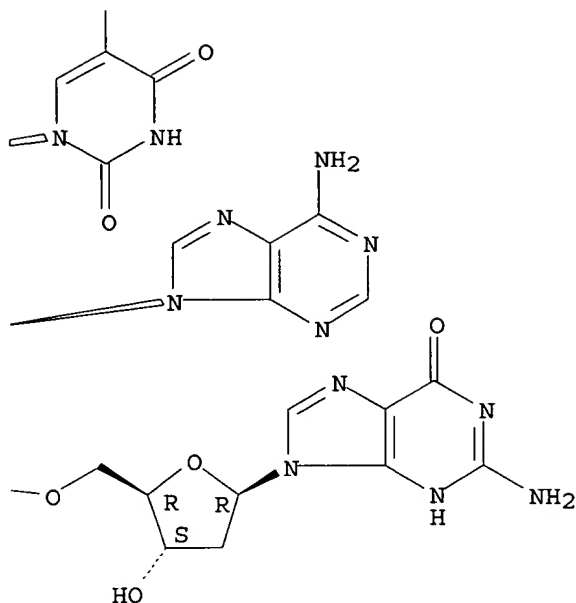
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|

PAGE 2-A

Me
|



PAGE 2-B



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:163701 CAPLUS
 DOCUMENT NUMBER: 128:240364
 TITLE: CD95 gene regulatory sequences and transcription factors binding thereto and methods for modulating CD95 gene expression and apoptosis
 INVENTOR(S): Watson, James D.; Rudert, Fritz
 PATENT ASSIGNEE(S): Genesis Research & Development Corporation Limited, N. Z.
 SOURCE: PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION: -

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9808965 | A2 | 19980305 | WO 1997-NZ107 | 19970829 |
| WO 9808965 | A3 | 19980507 | | |
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| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5912168 | A | 19990615 | US 1996-713557 | 19960830 |
| CA 2263824 | AA | 19980305 | CA 1997-2263824 | 19970829 |
| AU 9740367 | A1 | 19980319 | AU 1997-40367 | 19970829 |
| AU 732766 | B2 | 20010426 | | |

| | | | | |
|-----------------------------------|----|----------|----------------|------------|
| EP 956358 | A2 | 19991117 | EP 1997-937917 | 19970829 |
| R: CH, DE, FR, GB, IT, LI, NL, SE | | | | |
| NZ 334359 | A | 20000825 | NZ 1997-334359 | 19970829 |
| JP 2000517183 | T2 | 20001226 | JP 1998-511517 | 19970829 |
| PRIORITY APPLN. INFO.: | | | US 1996-713557 | A 19960830 |
| | | | WO 1997-NZ107 | W 19970829 |

ED Entered STN: 19 Mar 1998

AB Regulatory DNA sequences that silence and enhance transcription of the CD95 gene, which is instrumental in apoptosis, are disclosed. Proteinaceous transcription factors that bind to the silencer and enhancer regulatory sequences are also disclosed. The regulatory sequences and transcription factors may be used to modulate expression of the CD95 gene. Methods for regulating apoptosis have therapeutic and prophylactic applications for a variety of disorders, including cancer, viral and retroviral infections, neurodegenerative disorders, immune system dysfunction, and other disorders. YB-1 and Pura transcription factors were found to bind to the CD95 silencer while YB-1 and hnRNP D bound to the enhancer. Using electrophoretic mobility shift assays, UV crosslinking, and Southwestern anal. complexes with mol. weight 59, 113 and 200-300 kDa were demonstrated to form with the enhancer while complexes with mol. weight 47, 77 and 100 kDa formed with the silencer.

IT **204200-42-0**

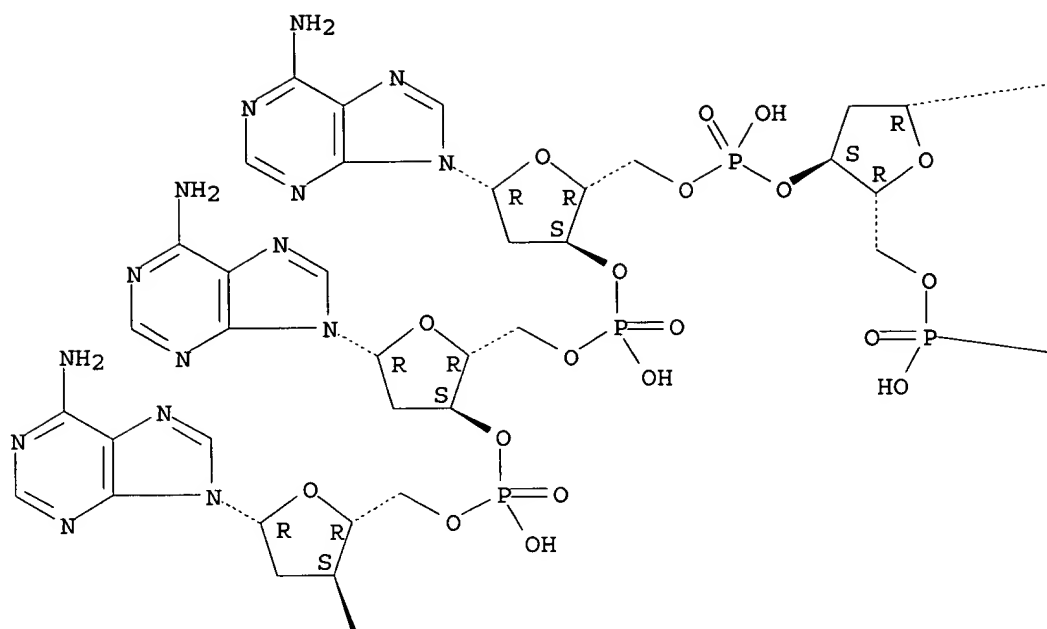
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
 (CD95 gene enhancer element; CD95 gene regulatory sequences and transcription factors binding thereto and methods for modulating CD95 gene expression and apoptosis)

RN 204200-42-0 CAPLUS

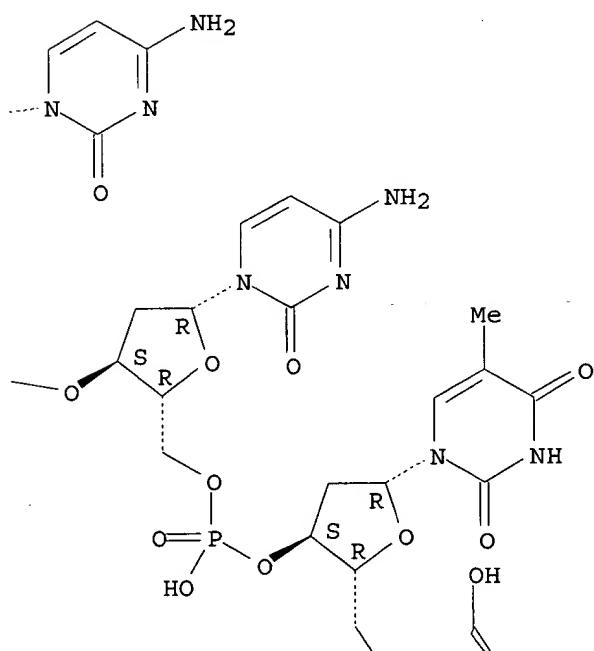
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



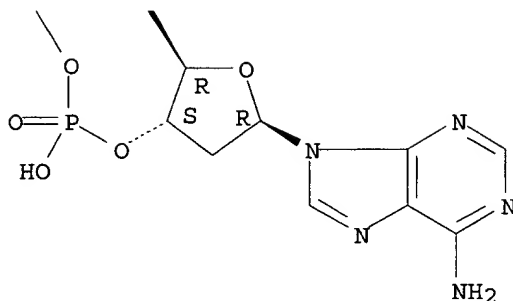
PAGE 1-B



PAGE 2-A



PAGE 2-B



L46 ANSWER 4 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:629748 CAPLUS
 DOCUMENT NUMBER: 129:271516
 TITLE: DNA spacer regulatory elements responsive to cytokines
 involving STAT factors (Signal Transducers and
 Activators of Transcription) and methods for their use
 in expression cloning
 INVENTOR(S): Seidel, H. Martin; Lamb, I. Peter
 PATENT ASSIGNEE(S): Ligand Pharmaceuticals, Inc., USA
 SOURCE: U.S., 58 pp., Cont.-in-part of U. S. Ser. No. 228,935,
 abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5814517 | A | 19980929 | US 1995-410779 | 19950327 |
| PRIORITY APPLN. INFO.: | | | US 1994-228935 | B2 19940414 |

ED Entered STN: 06 Oct 1998

AB Many cytokines activate STAT transcription factors (Signal Transducers and Activators of Transcription) that can bind to similar sequences (GAS/APREs) that regulate distinct sets of genes. This suggests that there is specificity with respect to the response elements in some of these genes, such that they respond only to one of these cytokines. Specific DNA sequences that show selectivity with respect to their ability to bind cytokine-activated proteins, including STAT proteins, would be useful tools allowing the responses mediated by different cytokine-activated DNA-binding proteins to be assayed selectively. Therefore, DNA constructs comprising oligonucleotide sequences containing the general regulatory element TTNxAA were synthesized and assayed for their ability to control the expression of structural genes, for the detection and recovery of transcriptional regulatory proteins, and for measuring the ability of compds. to act as agonists and antagonists of gene transcription.

IT 172652-88-9 172652-89-0 172652-90-3

172652-91-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

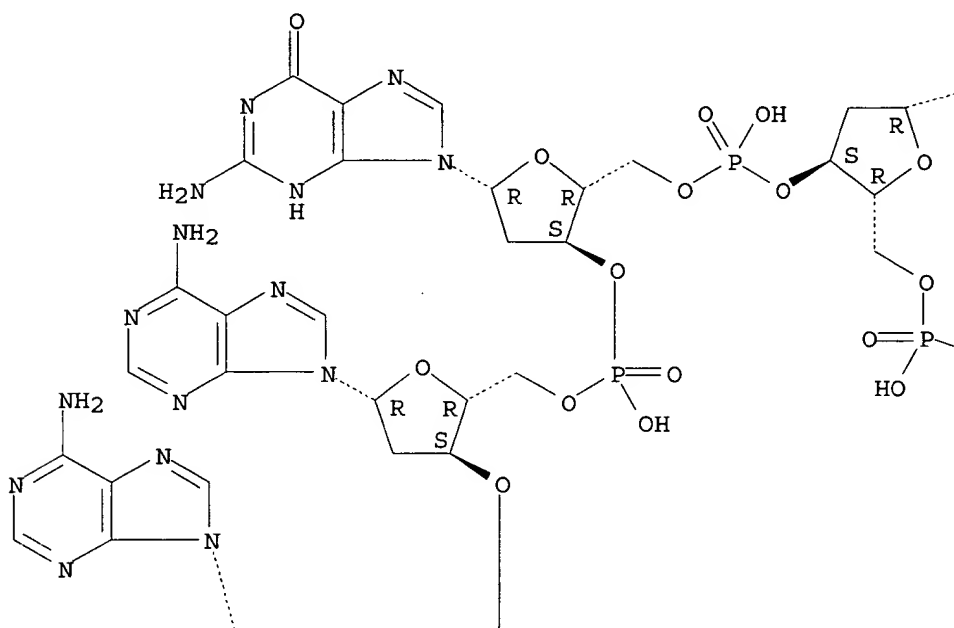
(DNA spacer regulatory elements responsive to cytokines involving STAT factors and methods for their use in expression cloning)

RN 172652-88-9 CAPLUS

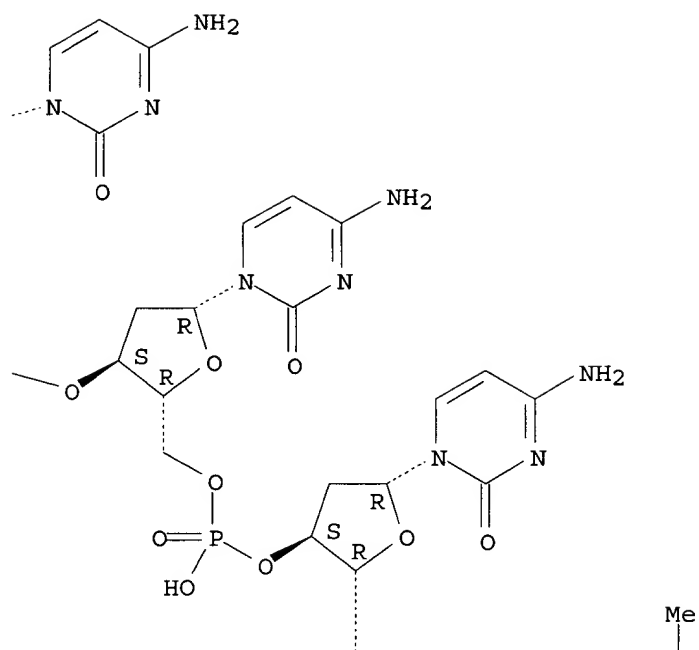
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Absolute stereochemistry.

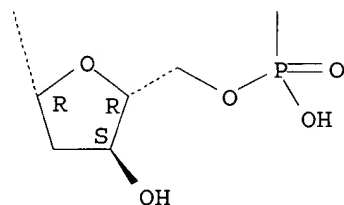
PAGE 1-A



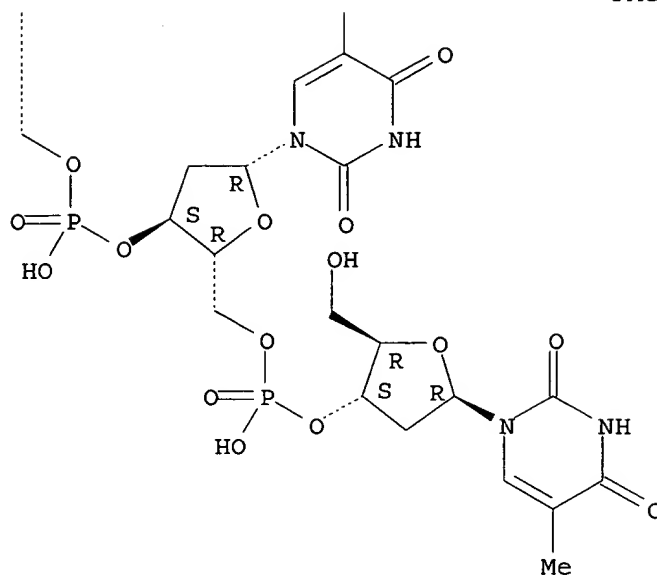
PAGE 1-B



PAGE 2-A



PAGE 2-B

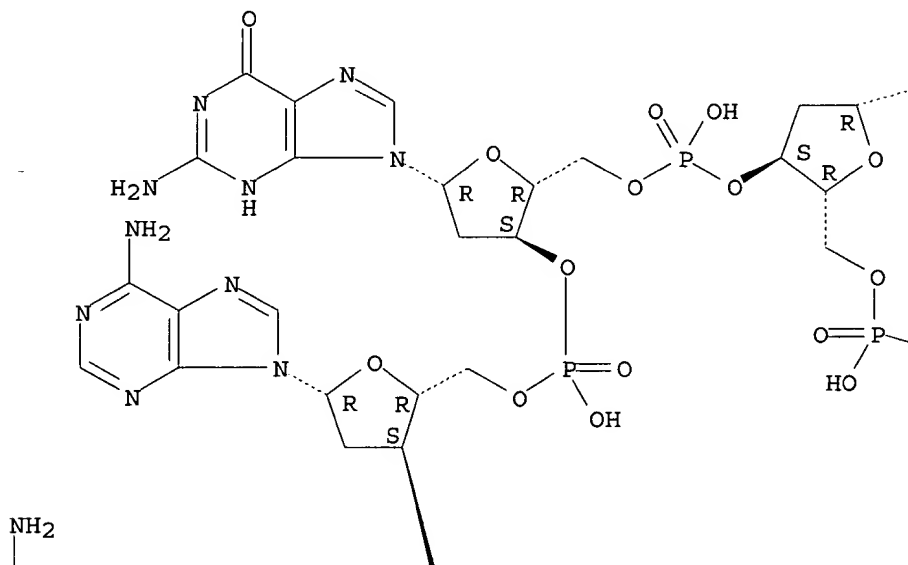


RN 172652-89-0 CAPLUS

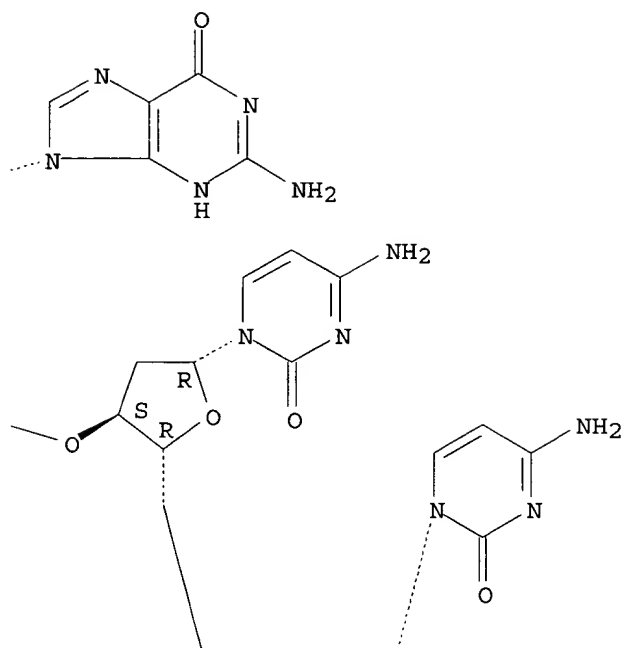
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Absolute stereochemistry.

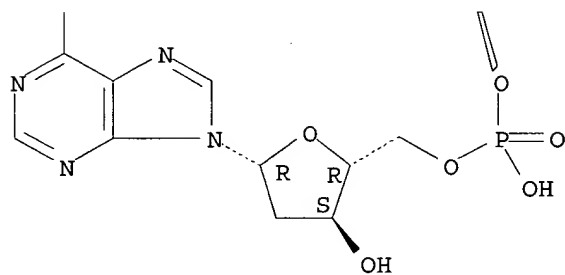
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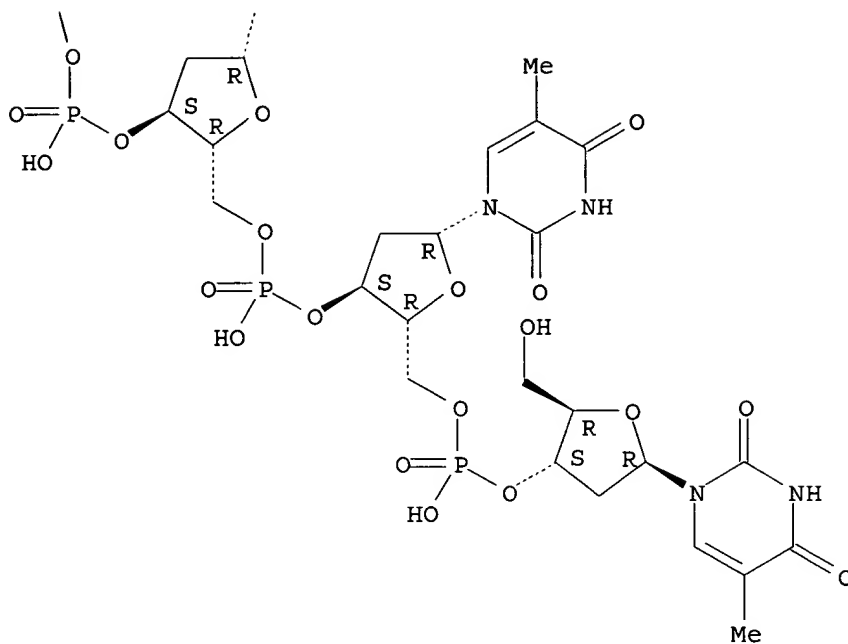
PAGE 1-B



PAGE 2-A



PAGE 2-B

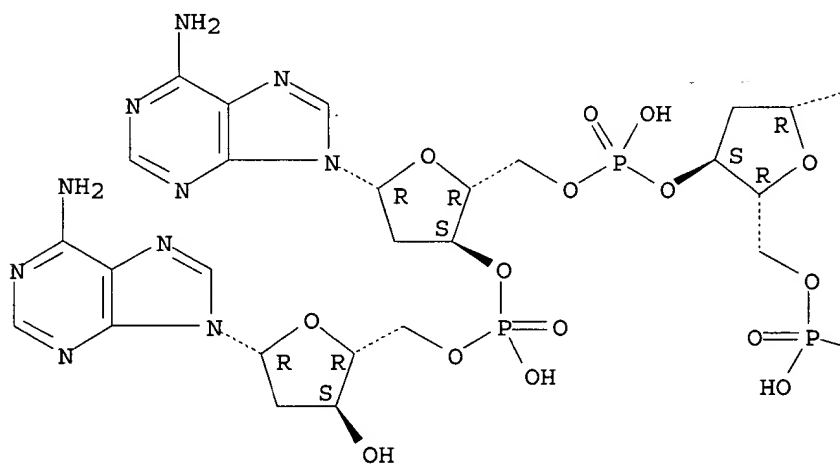


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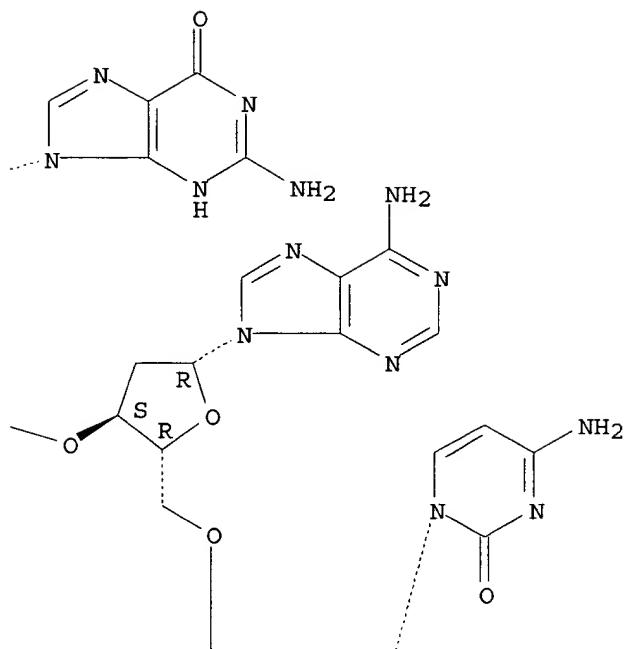
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
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Absolute stereochemistry.

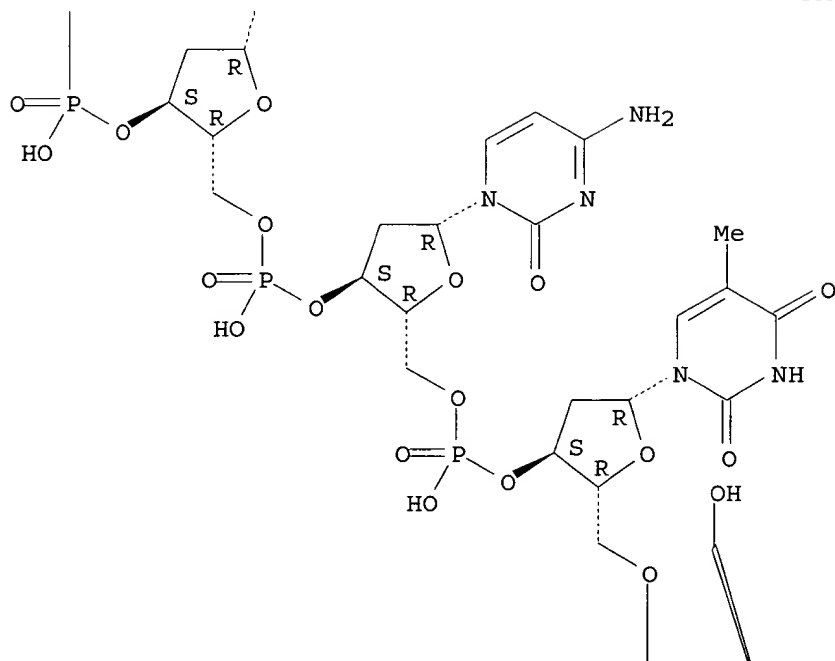
PAGE 1-A



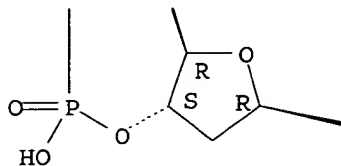
PAGE 1-B



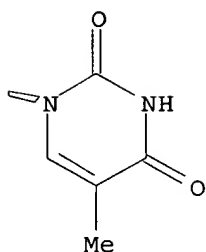
PAGE 2-B



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PAGE 3-C

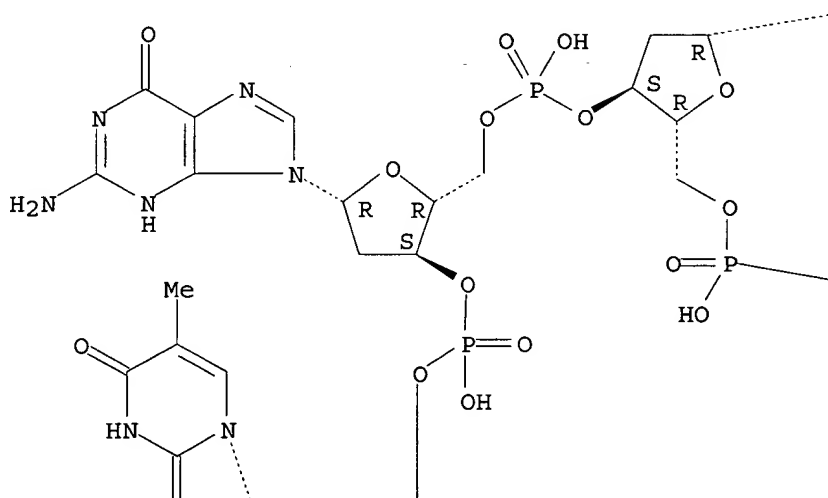


RN 172652-91-4 CAPLUS

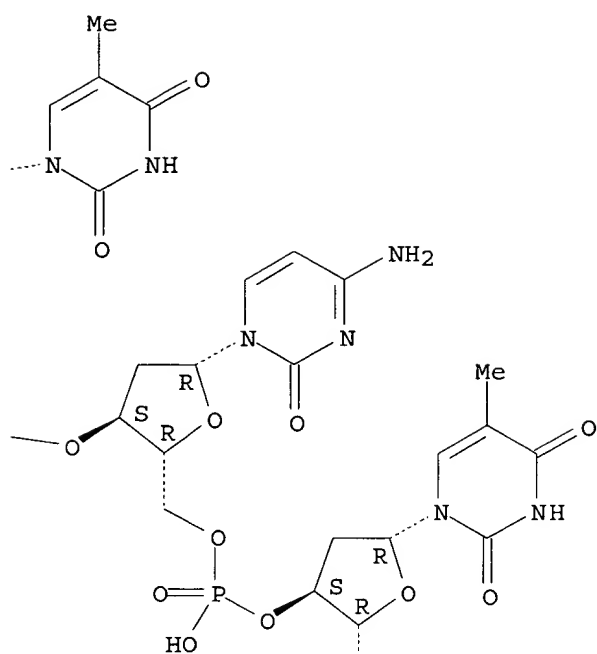
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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Absolute stereochemistry.

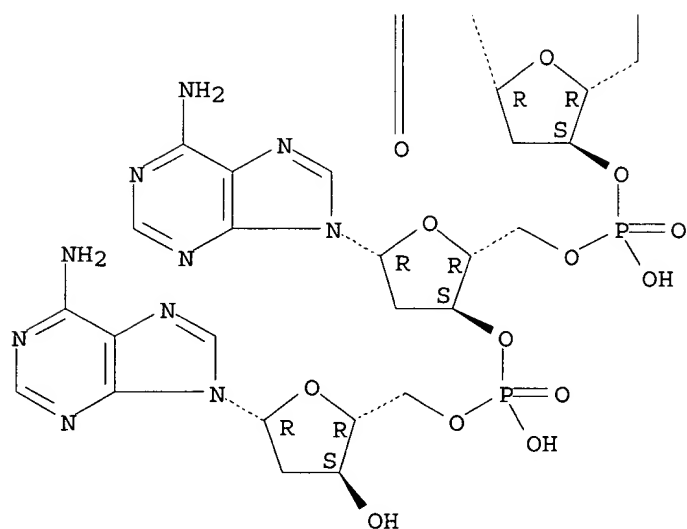
PAGE 1-A



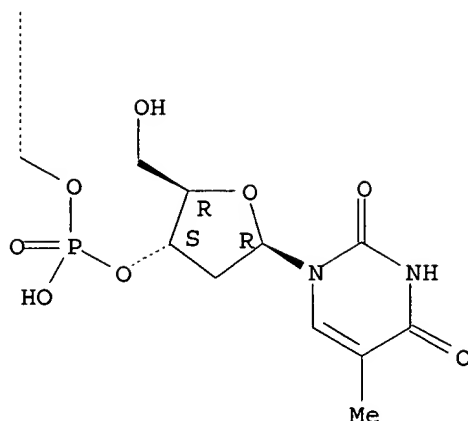
PAGE 1-B



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PAGE 2-B



REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:214317 CAPLUS

DOCUMENT NUMBER: 128:279586

TITLE: Reagents and methods for modulating gene expression through RNA mimicry

INVENTOR(S): Ecker, David J.; Bruice, Thomas W.; Vickers, Timothy A.

PATENT ASSIGNEE(S): Isis Pharmaceuticals, Inc., USA

SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 497,090, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5736294 | A | 19980407 | US 1991-724500 | 19910627 |
| CA 2078659 | AA | 19910922 | CA 1991-2078659 | 19910319 |
| HU 62658 | A2 | 19930528 | HU 1992-3010 | 19910319 |
| US 5874564 | A | 19990223 | US 1995-461418 | 19950605 |
| PRIORITY APPLN. INFO.: | | | US 1990-497090 | B2 19900321 |
| | | | US 1992-927505 | B1 19920916 |

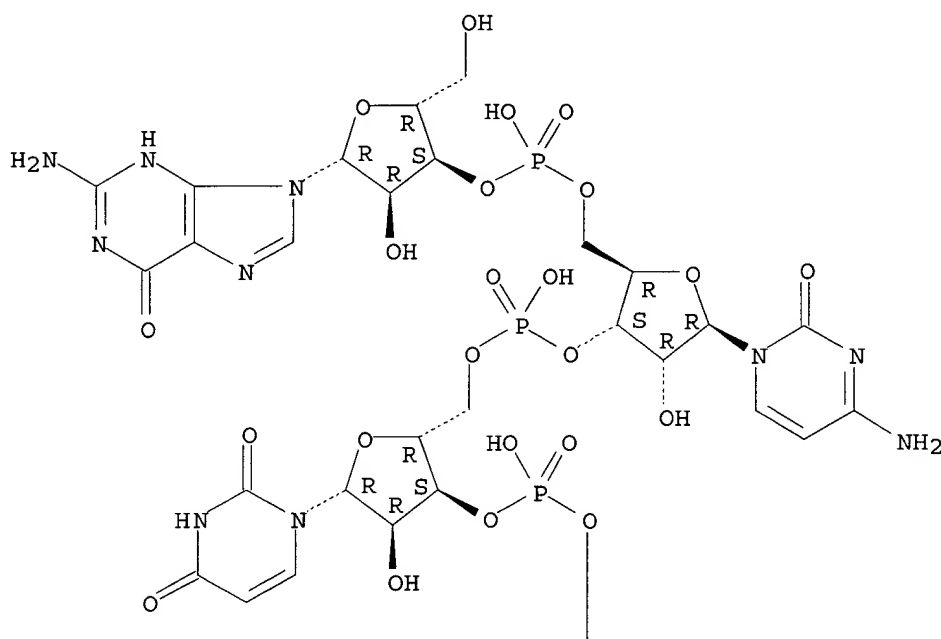
ED Entered STN: 16 Apr 1998

AB Expression of genes may be modulated by employment of compns. which are capable of RNA mimicry. A portion of RNA coded by the gene whose expression is to be modulated is selected which is capable of interacting with one or more proteins. An oligonucleotide or oligonucleotide analog is then prepared in such a way as to mimic the portion of the RNA. Cells containing the gene are then contacted with the oligonucleotide or oligonucleotide analog to effect the modulation. Therapeutic compns. and methods, especially for the treatment of human immunodeficiency, are disclosed in which oligonucleotide mimics of the TAR element interfere with binding of the TAR element to Tat protein and thus inhibit HIV replication. The oligonucleotide mimics are modified with 2'-O-Me groups or within the pyrimidine moiety (5-bromouridine, 6-azauridine, etc.) for improved nuclease resistance within the cell.

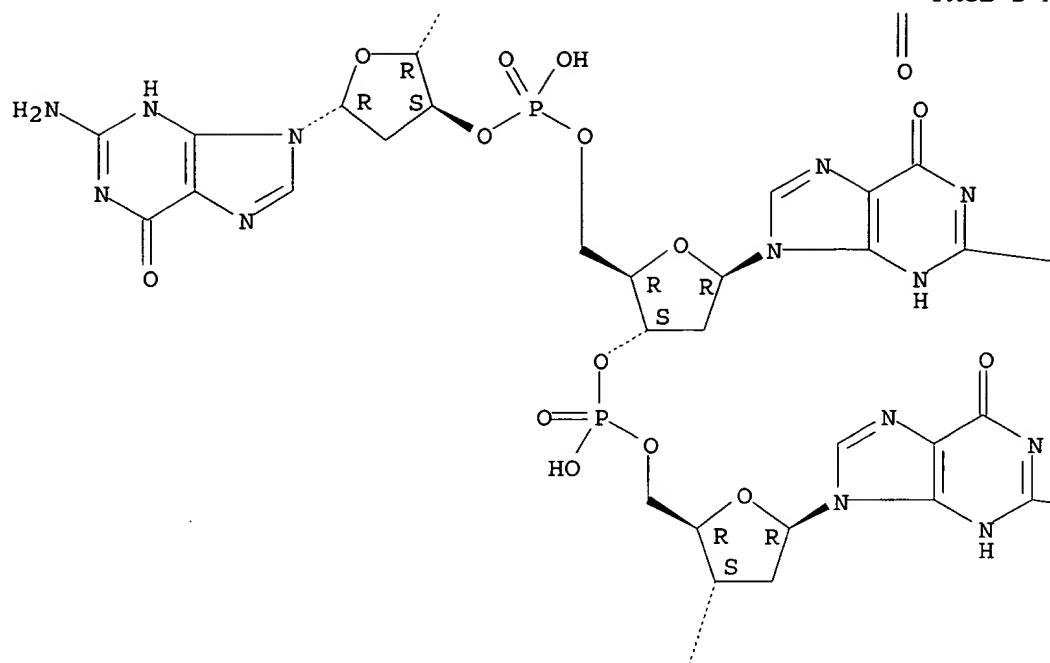
IT 138029-68-2 138072-09-0 138072-09-0D,
 oligonucleotide or analog containing 138072-10-3D, oligonucleotide
 or analog containing
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (modulating gene expression through RNA mimicry for inhibition of HIV
 TAR element interaction with the Tat protein)
 RN 138029-68-2 CAPLUS
 CN Guanosine, cytidylyl-(5'→3')-guanylyl-(5'→3')-guanylyl-
 (5'→3')-uridylyl-(5'→3')-cytidylyl-(5'→3')-uridylyl-
 (5'→3')-cytidylyl-(5'→3')-uridylyl-(5'→3')-cytidylyl-
 (5'→3')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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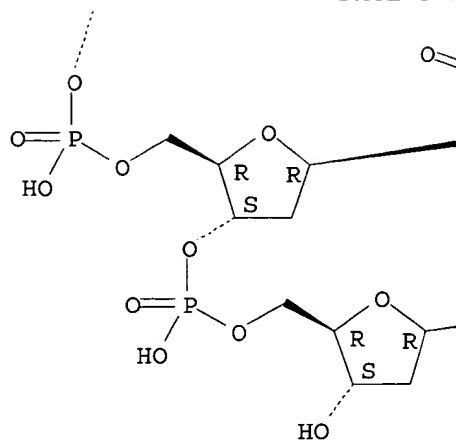


PAGE 2-B

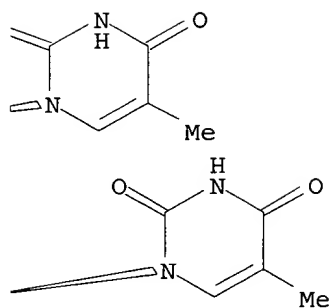
NH₂

NH₂

PAGE 3-A



PAGE 3-B

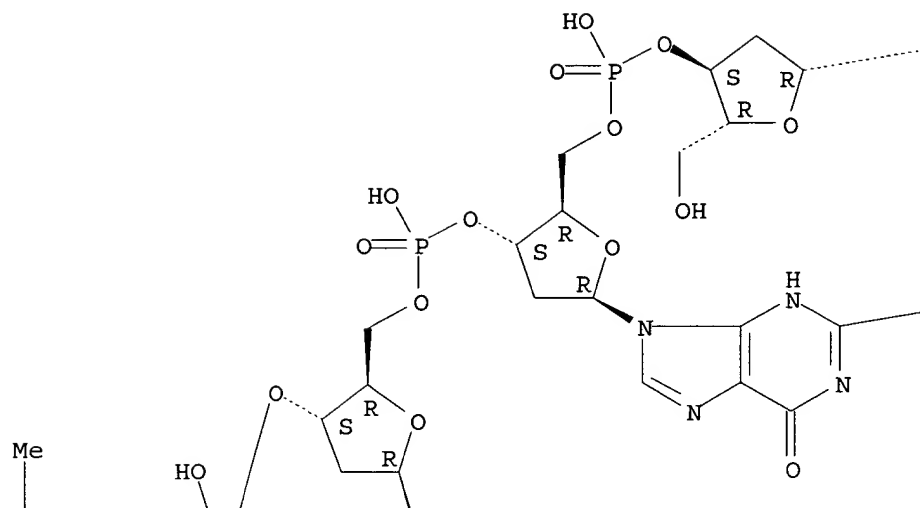


RN 126596-01-8 CAPLUS

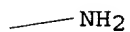
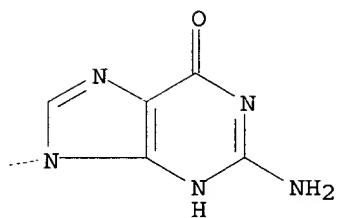
CN DNA, d(G-G-G-G-T-T-G-G-G-G) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

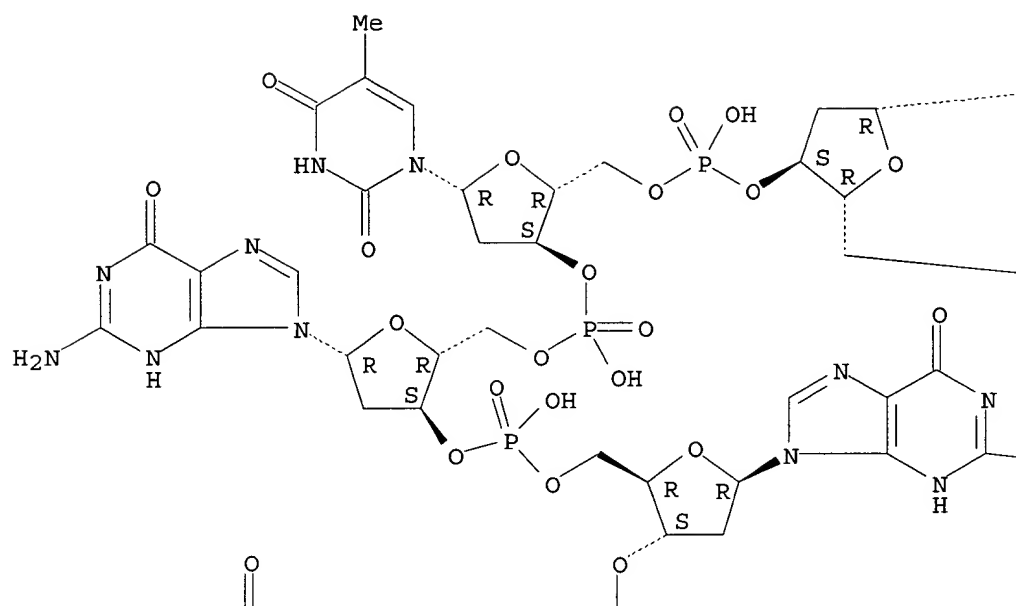
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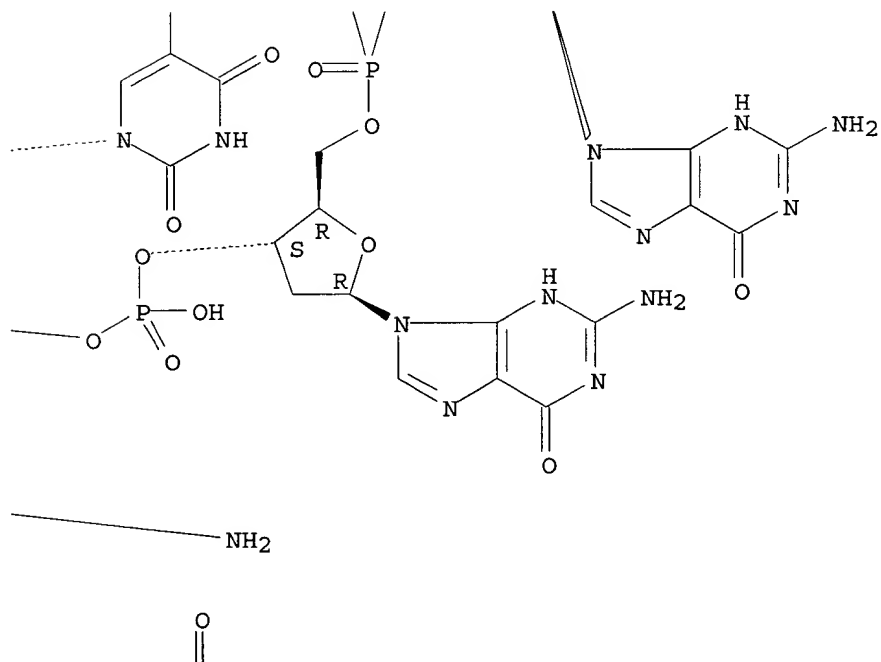
PAGE 1-C



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AB Compns. and methods are provided for the treatment and diagnosis of herpesvirus infections. In accordance with preferred embodiments, oligonucleotides are provided which are specifically hybridizable with RNA or DNA deriving from a herpesvirus gene corresponding to one of the open reading frames UL5, UL8, UL9, UL20, UL27, UL29, UL30, UL42, UL52 and IE175 of herpes simplex virus type 1. The oligonucleotide comprises nucleotide units sufficient in identity and number to effect said specific hybridization. In other preferred embodiments, the oligonucleotides are specifically hybridizable with a translation initiation site, a coding region or a 5'-untranslated region. Methods of treating animals suspected of being infected with herpesvirus comprising contacting the animal with an oligonucleotide of the invention are disclosed. Methods for treatment of infections caused by herpes simplex virus type 1, herpes simplex virus type 2, cytomegalovirus, human herpes virus 6, Epstein Barr virus or varicella zoster virus are disclosed.

IT 126208-94-4 126596-01-8 155902-32-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

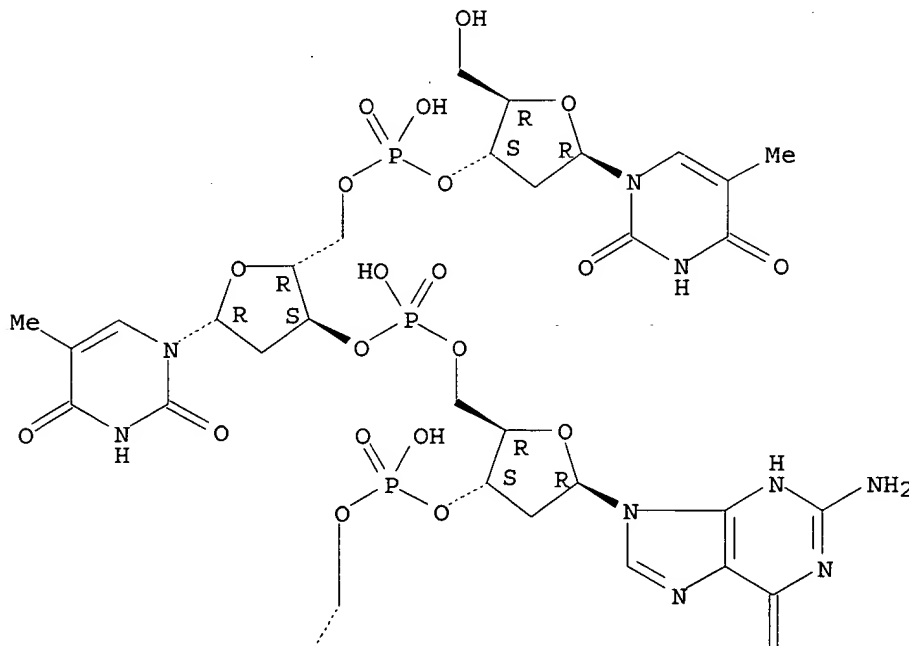
(antisense oligonucleotides for treating infections from herpes viruses)

RN 126208-94-4 CAPLUS

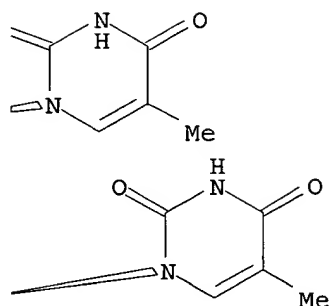
CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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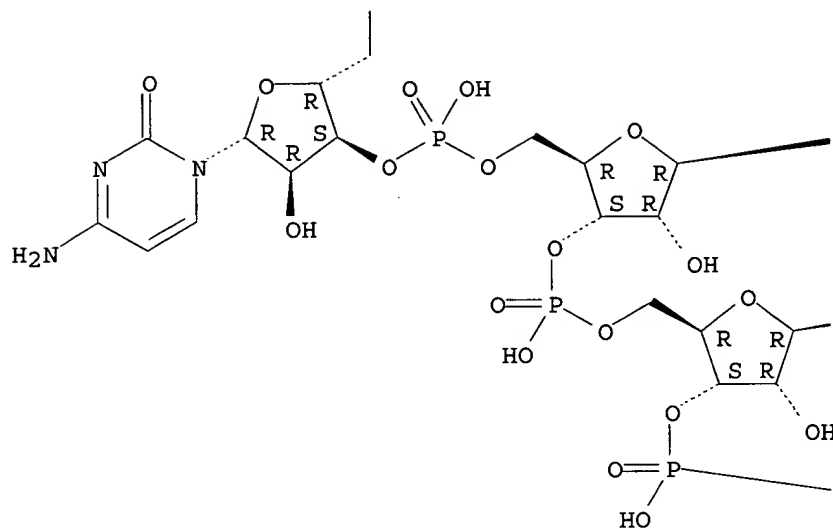


L46 ANSWER 21 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:333023 CAPLUS
 DOCUMENT NUMBER: 125:49274
 TITLE: Oligonucleotide therapies for modulating the effects of herpes viruses
 INVENTOR(S): Draper, Kenneth G.; Crooke, Stanley T.; Mirabelli, Christopher K.; Ecker, David J.; Hanecak, Ronnie C.; Anderson, Kevin P.; Brown-Driver, Vickie L.; Wyatt, Jacqueline R.
 PATENT ASSIGNEE(S): Isis Pharmaceuticals, Inc., USA
 SOURCE: U.S., 28 pp., Cont.-in-part of U.S. 5, 248, 670.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

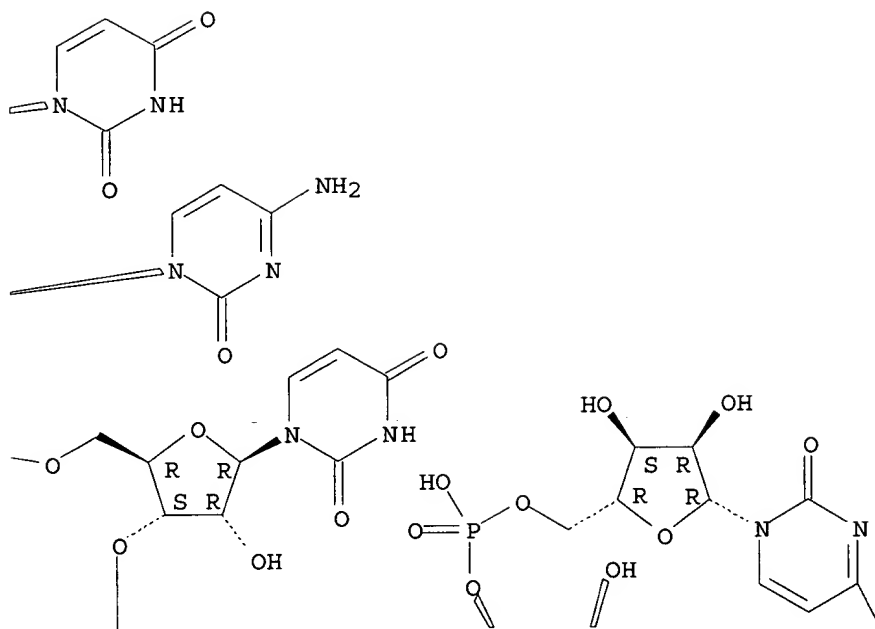
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| US 5514577 | A | 19960507 | US 1993-31147 | 19930312 |
| US 5248670 | A | 19930928 | US 1990-485297 | 19900226 |
| US 6310044 | B1 | 20011030 | US 1992-852132 | 19920428 |
| EP 1016715 | A1 | 20000705 | EP 1999-203835 | 19930929 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| WO 9419945 | A1 | 19940915 | WO 1994-US2471 | 19940307 |
| W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9463619 | A1 | 19940926 | AU 1994-63619 | 19940307 |
| EP 692930 | A1 | 19960124 | EP 1994-910879 | 19940307 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 08503959 | T2 | 19960430 | JP 1994-520254 | 19940307 |
| US 5658891 | A | 19970819 | US 1994-329212 | 19941026 |
| PRIORITY APPLN. INFO.: | | | US 1990-485297 | A2 19900226 |
| | | | US 1992-852132 | A2 19920428 |
| | | | US 1992-954185 | B2 19920929 |
| | | | WO 1991-US1327 | W 19910225 |
| | | | US 1993-31147 | A 19930312 |
| | | | US 1993-122328 | B1 19930916 |
| | | | EP 1993-922788 | A3 19930929 |
| | | | WO 1994-US2471 | W 19940307 |

ED Entered STN: 08 Jun 1996

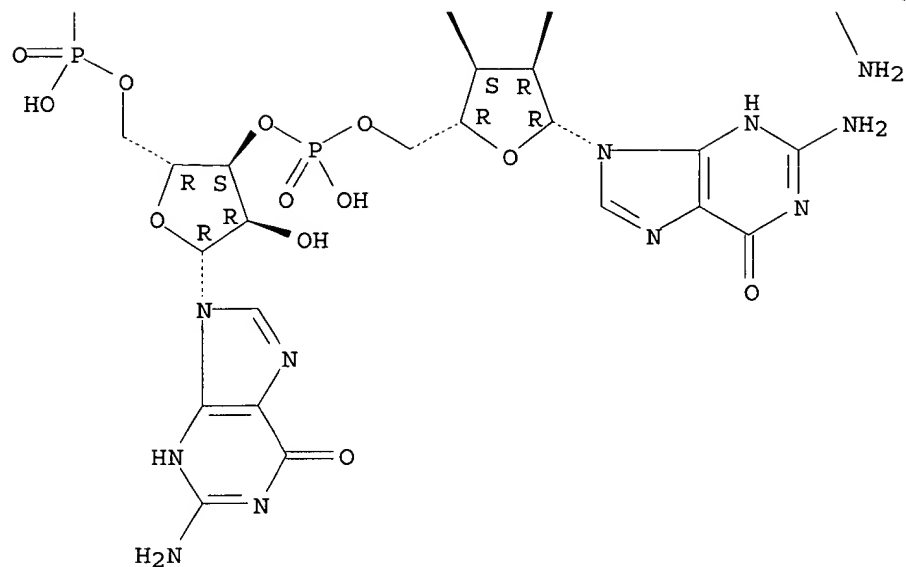
PAGE 2-A



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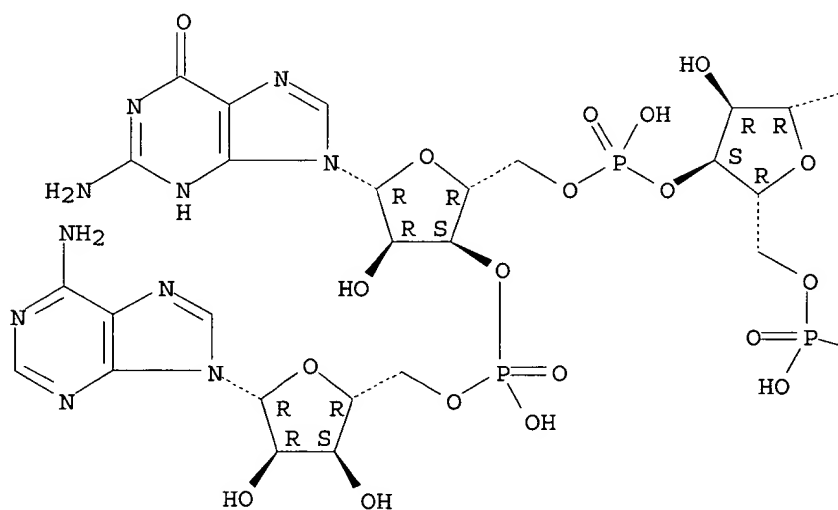


RN 138072-09-0 CAPLUS

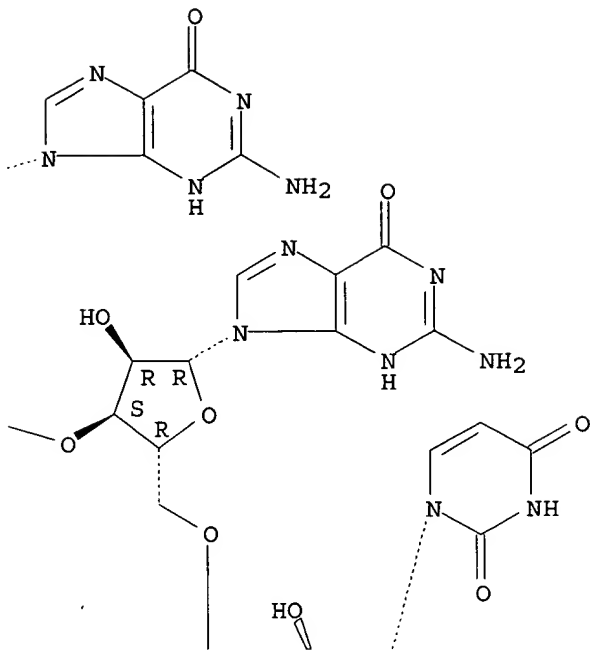
CN Adenosine, cytidyl-(3'→5')-uridylyl-(3'→5')-guanylyl-
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 INDEX NAME)

Absolute stereochemistry.

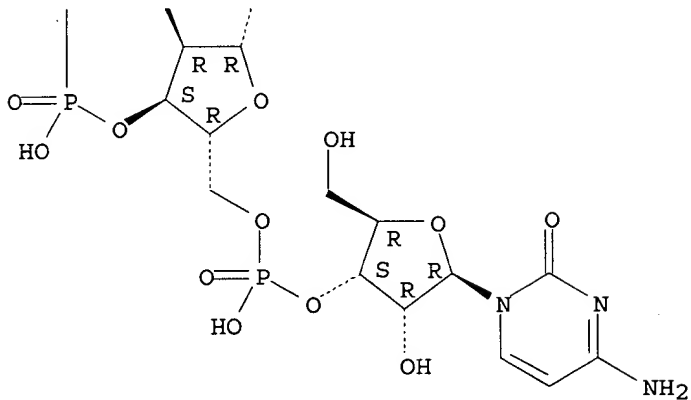
PAGE 1-A



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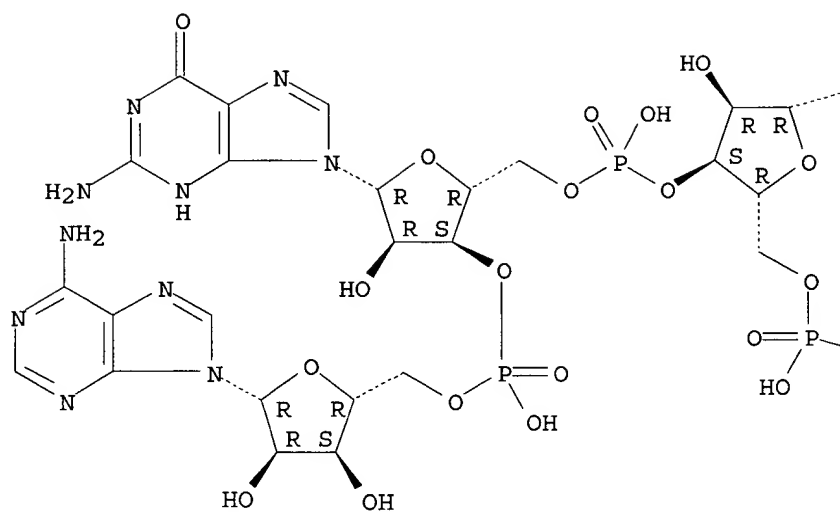
PAGE 2-B



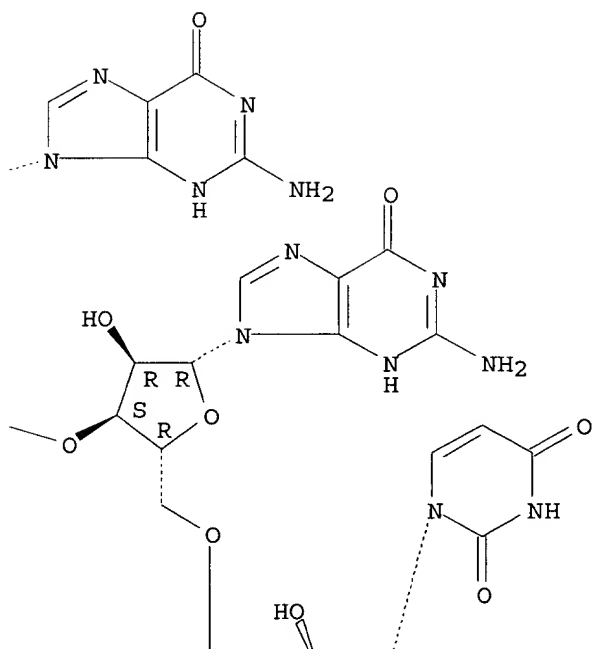
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RN      138072-09-0  CAPLUS
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        INDEX NAME)
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Absolute stereochemistry.

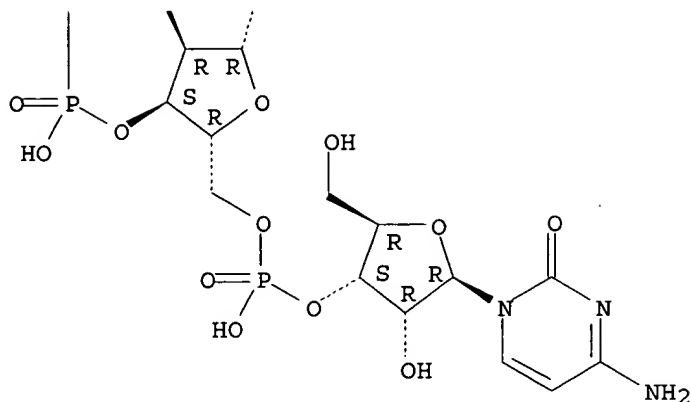
PAGE 1-A



PAGE 1-B



PAGE 2-B

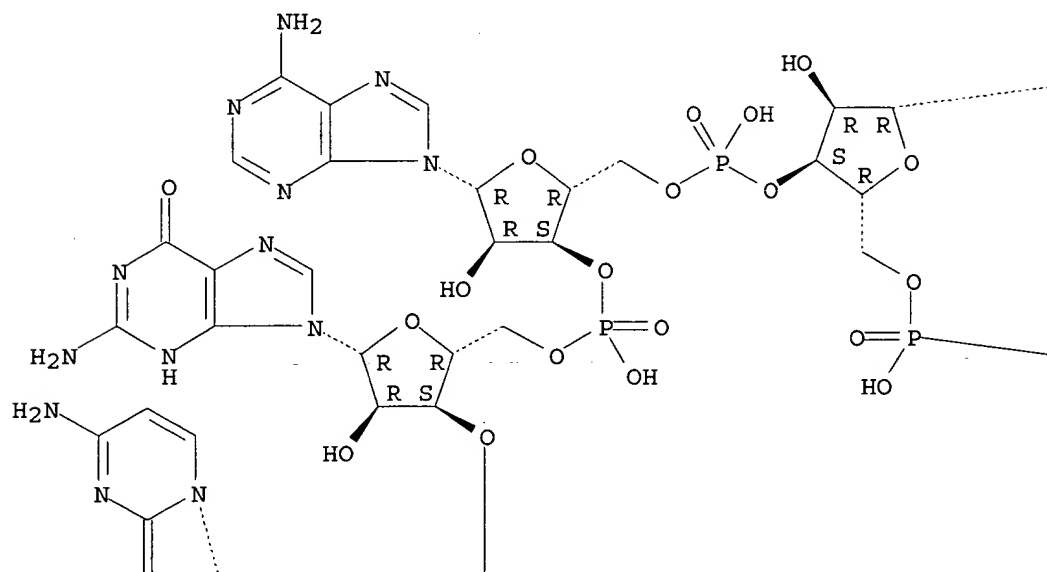


RN 138072-10-3 CAPLUS

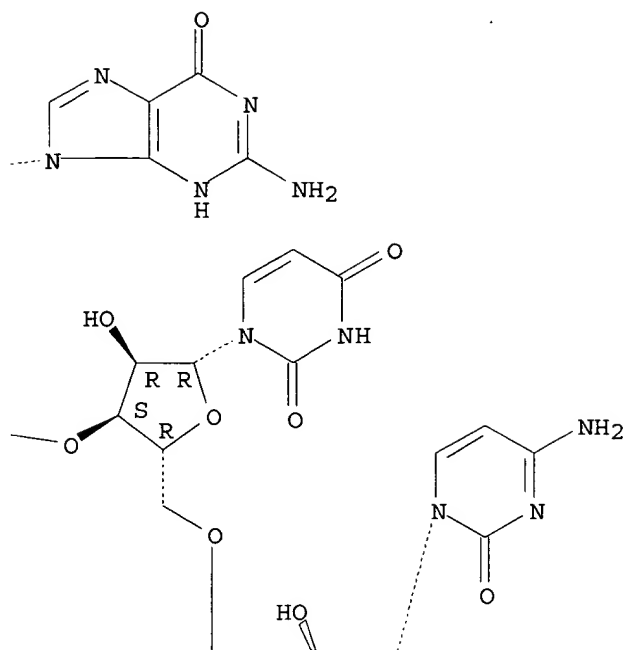
CN Cytidine, uridylyl-(3'→5')-cytidylyl-(3'→5')-uridylyl-
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Absolute stereochemistry.

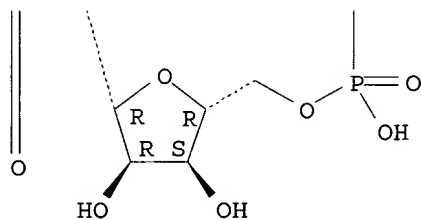
PAGE 1-A



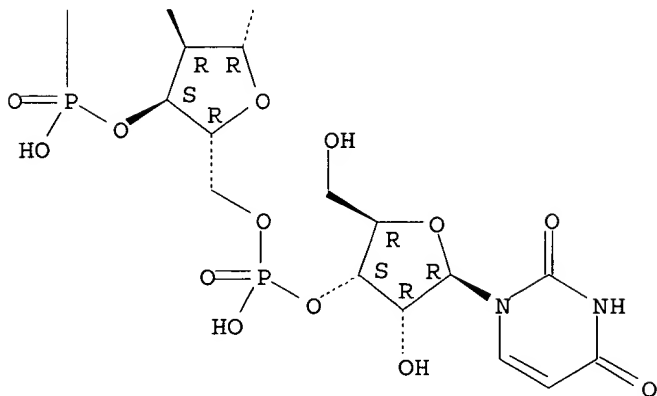
PAGE 1-B



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REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:75991 CAPLUS

DOCUMENT NUMBER: 128:162858

TITLE: Oligoribonucleotide assays for novel antibiotic screening

INVENTOR(S): Stern, Seth; Purohit, Prakash

PATENT ASSIGNEE(S): University of Massachusetts Medical Center, USA

SOURCE: U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 294,450, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 5712096 | A | 19980127 | US 1995-498402 | 19950705 |
| CA 2198261 | AA | 19960229 | CA 1995-2198261 | 19950823 |
| CA 2198261 | C | 20031028 | | |
| WO 9606106 | A1 | 19960229 | WO 1995-US10721 | 19950823 |
| W: AU, CA, CN, CZ, FI, HU, JP, KR, MX, NO, NZ, PL, RO, RU | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9534134 | A1 | 19960314 | AU 1995-34134 | 19950823 |
| EP 804454 | A1 | 19971105 | EP 1995-930926 | 19950823 |
| EP 804454 | B1 | 20040526 | | |
| R: CH, DE, FR, GB, IT, LI | | | | |

PRIORITY APPLN. INFO.:
 US 1994-294450 B2 19940823
 US 1995-498402 A 19950705
 WO 1995-US10721 W 19950823

ED Entered STN: 09 Feb 1998

AB The oligoribonucleotide analogs of the invention are relatively small, three-dimensional structures derived from larger parental RNA mols. The analogs include a first nucleic acid structure including one or more nucleotide sequences that are derived from a region of parental RNA, wherein in its native state, the region binds to a ligand, e.g., an aminoglycoside, with a parental RNA ligand binding pattern, and a second nucleic acid structure including one or more nucleotide sequences combined with the first nucleic acid structure to form the analog and provide the analog with a conformation that binds the ligand with a ligand binding pattern that is substantially identical to the parental RNA ligand binding pattern. These analogs can be used to identify novel therapeutic compds.

IT 169174-34-9

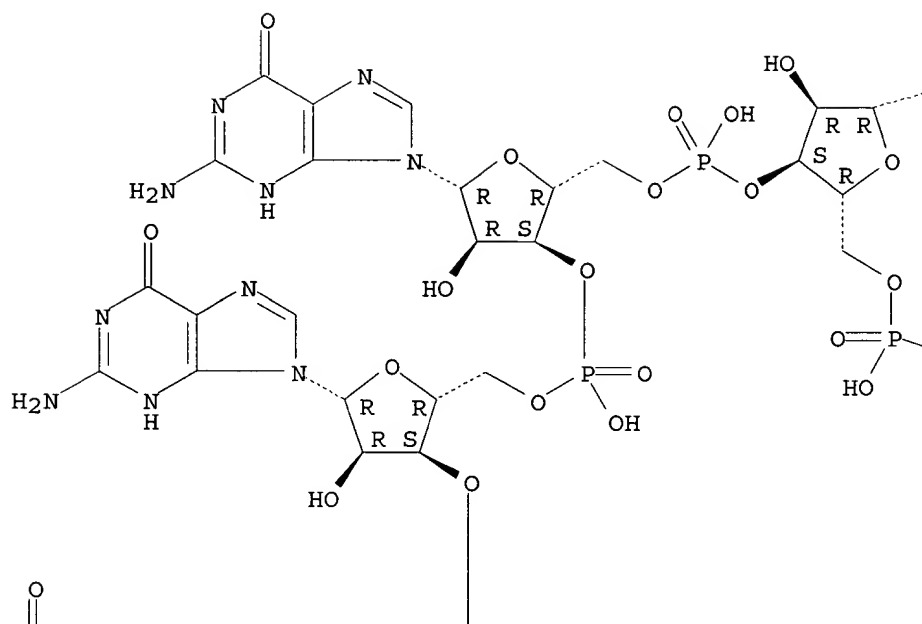
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
 (oligoribonucleotide assays for novel antibiotic screening)

RN 169174-34-9 CAPLUS

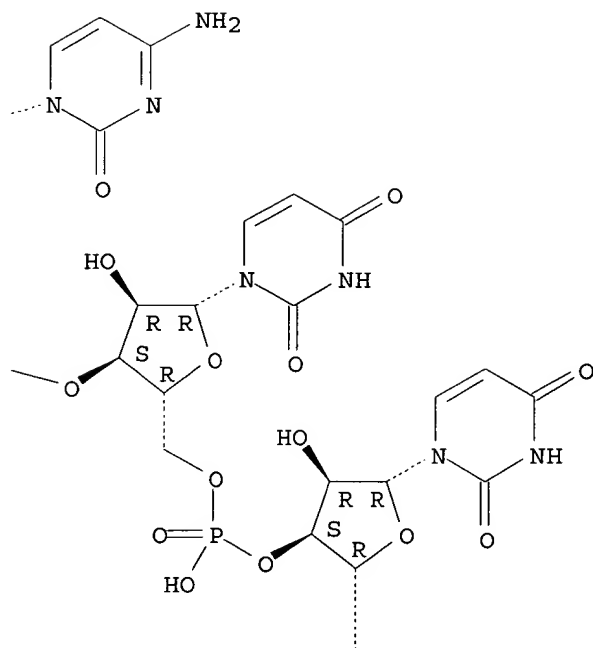
CN Guanosine, cytidylyl-(3'→5')-cytidylyl-(3'→5')-uridylyl-(3'→5')-uridylyl-(3'→5')-cytidylyl-(3'→5')-guanylyl-(3'→5')-guanylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

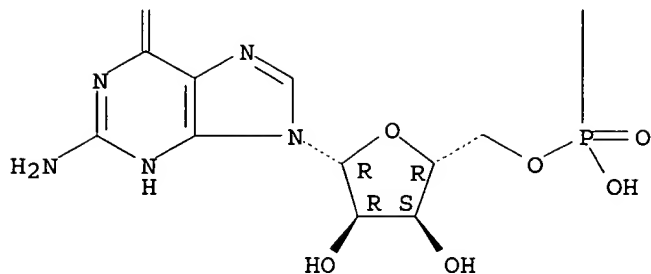
PAGE 1-A



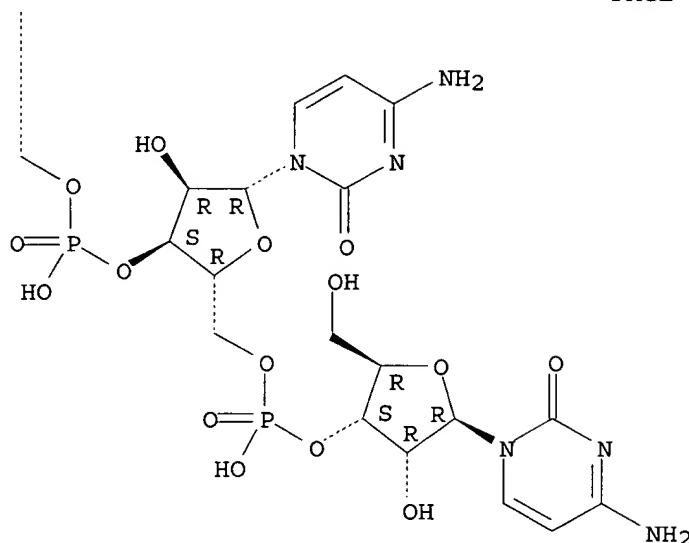
PAGE 1-B



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PAGE 2-B



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 7 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:512115 CAPLUS
 DOCUMENT NUMBER: 129:134769
 TITLE: Jumping translocation-related gene of human and use for diagnosis of chromosome aberrations
 INVENTOR(S): Ishikawa, Fuyuki
 PATENT ASSIGNEE(S): Kirin Brewery Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------|------|----------|-----------------|----------|
| JP 10210983 | A2 | 19980811 | JP 1997-33078 | 19970131 |
| PRIORITY APPLN. INFO.: | | | JP 1997-33078 | 19970131 |
| ED Entered STN: 18 Aug 1998 | | | | |

AB The gene associated with jumping translocation has been identified in chromosome 1q21 from a patient with myelomonocytic leukemia that had transformed from myelodysplastic syndrome. Amino acid sequence deduced from the coding region and introns of the gene are also disclosed. Probes derived from the cDNA or the gene are also provided for detecting chromosome aberrations such as jumping translocations in mammals, which may be used for the diagnosis of cancer.

IT **117490-04-7P**

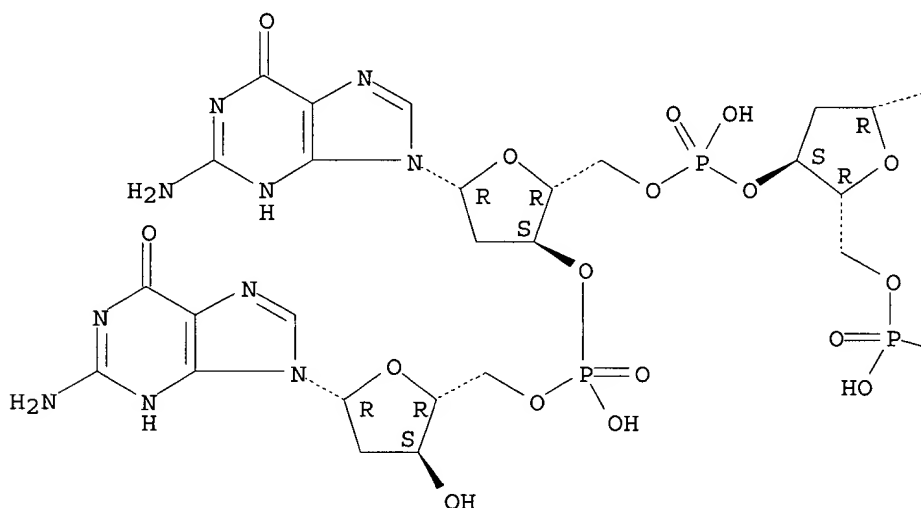
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(oligonucleotide probe; jumping translocation-related gene of human and use for diagnosis)

RN 117490-04-7 CAPLUS

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 9737669 | A1 | 19971016 | WO 1997-US6104 | 19970404 |
| W: AU, CA, JP, KR | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5837854 | A | 19981117 | US 1996-628422 | 19960405 |
| AU 9728014 | A1 | 19971029 | AU 1997-28014 | 19970404 |
| PRIORITY APPLN. INFO.: | | | US 1996-628422 | A 19960405 |
| | | | WO 1997-US6104 | W 19970404 |

ED Entered STN: 29 Oct 1997

AB Oligonucleotides that inhibit Epstein-Barr virus functions, pharmaceutical compns. containing such oligonucleotides, and methods of using these compns. to treat Epstein-Barr virus-associated diseases are disclosed.

IT 198065-19-9

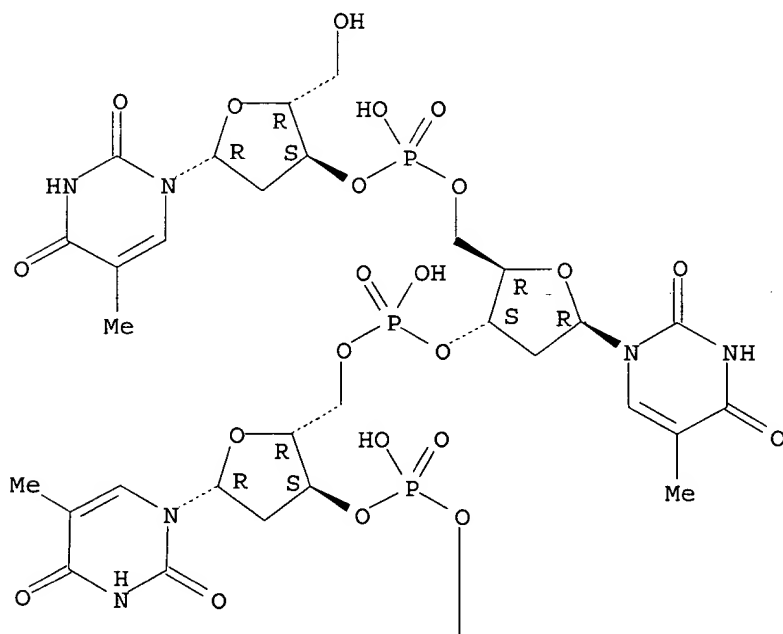
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oligonucleotides with anti-Epstein-Barr virus activity)

RN 198065-19-9 CAPLUS

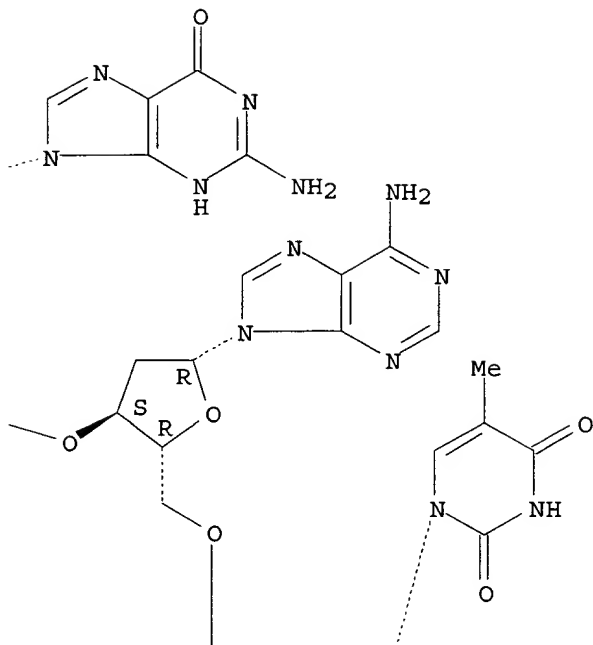
CN Cytidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

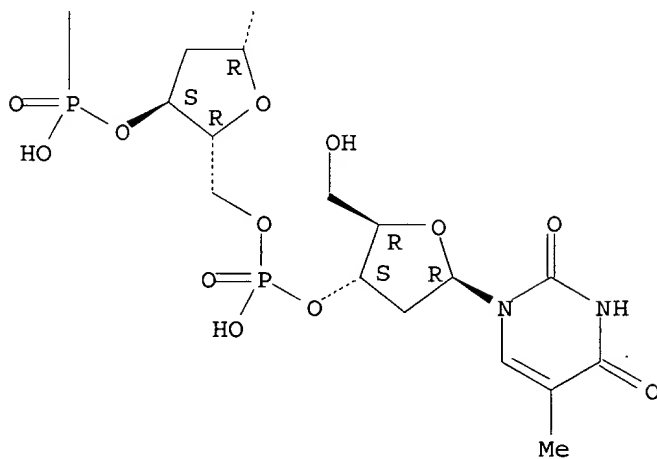
PAGE 1-A



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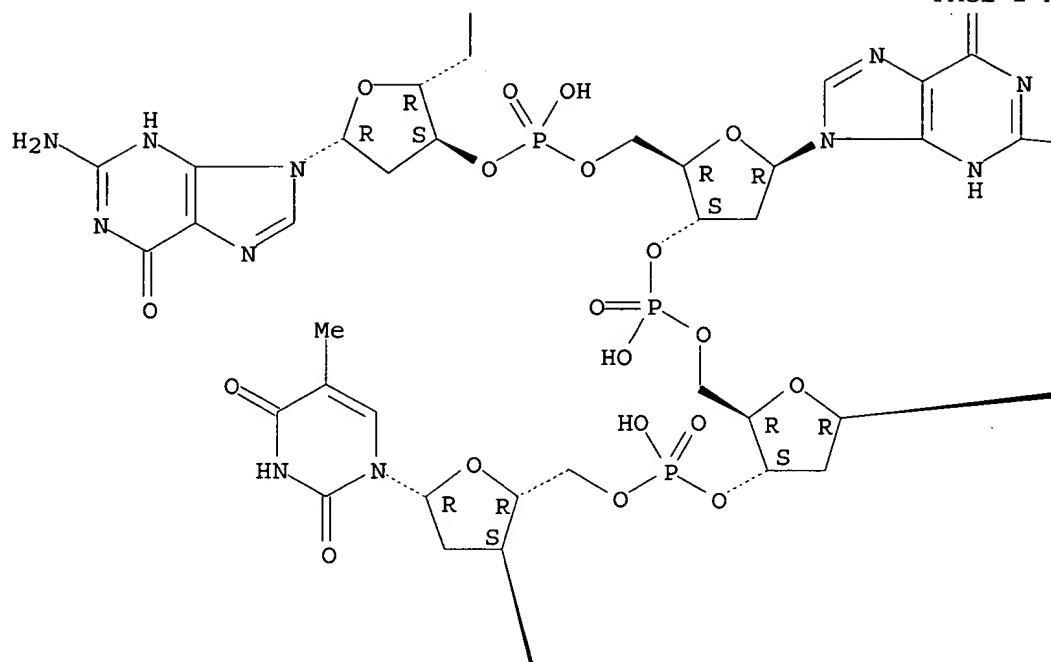


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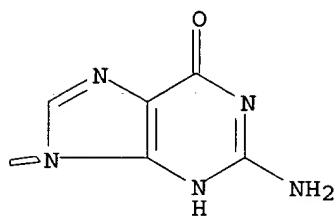


L46 ANSWER 8 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:684289 CAPLUS
DOCUMENT NUMBER: 127:351181
TITLE: Oligonucleotides with anti-Epstein-Barr virus activity
INVENTOR(S): Mulder, Carel
PATENT ASSIGNEE(S): University of Massachusetts, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

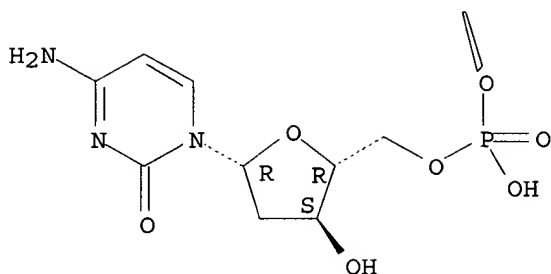
PAGE 2-A



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L46 ANSWER 9 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:739370 CAPLUS

DOCUMENT NUMBER: 128:19359

TITLE: Methods and reagents for lengthening telomeres

INVENTOR(S): West, Michael D.; Shay, Jerry; Wright, Woodring E.

PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA

SOURCE: U.S., 15 pp., Cont.-in-part of U.S. Ser. No. 151,477.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 21

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5686306 | A | 19971111 | US 1994-337684 | 19941110 |
| US 5489508 | A | 19960206 | US 1993-38766 | 19930324 |
| US 5695932 | A | 19971209 | US 1993-60952 | 19930513 |
| US 5645986 | A | 19970708 | US 1993-153051 | 19931112 |
| US 5830644 | A | 19981103 | US 1993-151477 | 19931112 |
| PRIORITY APPLN. INFO.: | | | US 1992-882438 | B2 19920513 |
| | | | US 1993-38766 | A2 19930324 |
| | | | US 1993-60952 | A2 19930513 |
| | | | US 1993-151477 | A2 19931112 |
| | | | US 1993-153051 | A2 19931112 |

ED Entered STN: 24 Nov 1997

AB A method for increasing telomere length in normal cells is described. It can be used to increase the proliferative capacity of cells and to delay the onset of cellular senescence. This method has applications in the fields of chemical, pharmacol., biol., mol. biol., and medical therapeutic and diagnostic technol. With this method, cells are cultivated in the presence of a therapeutically effective amount of a GTR (G-rich Telomeric repeat) oligonucleotide substrate for telomerase under conditions such that the oligonucleotide substrate enters the cells and acts to lengthen telomeric DNA. It is especially useful for cells expressing telomerase and for hybrids between immortal and mortal cells. It could also be used to reduce the level of chromosomal fusions and other chromosomal aberrations by increasing the telomere repeat length in cells.

IT 157961-44-9

RL: BUU (Biological use, unclassified); PRP (Properties); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleotide sequence of useful GTR (G-rich Telomeric repeat)

oligonucleotide; methods and reagents for lengthening telomeres)

RN 157961-44-9 CAPLUS

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-

deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary
(9CI) (CA INDEX NAME)

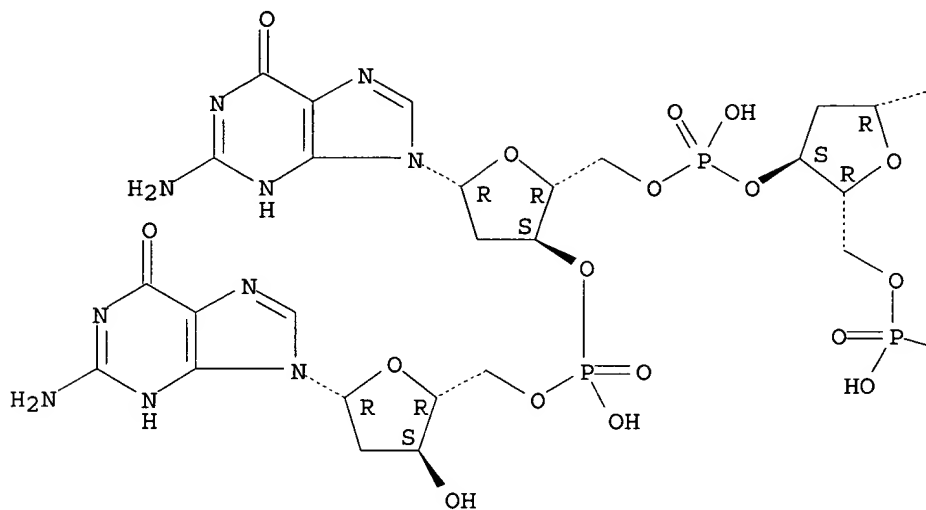
CM 1

CRN 117490-04-7

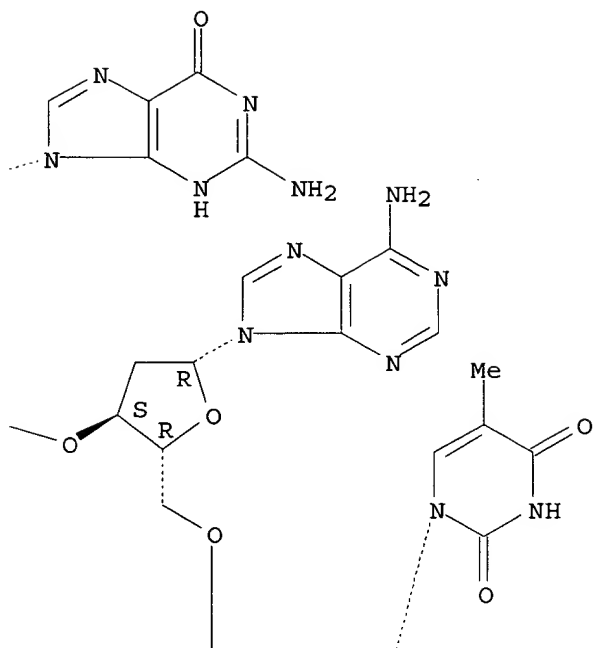
CMF C60 H75 N24 O35 P5

Absolute stereochemistry.

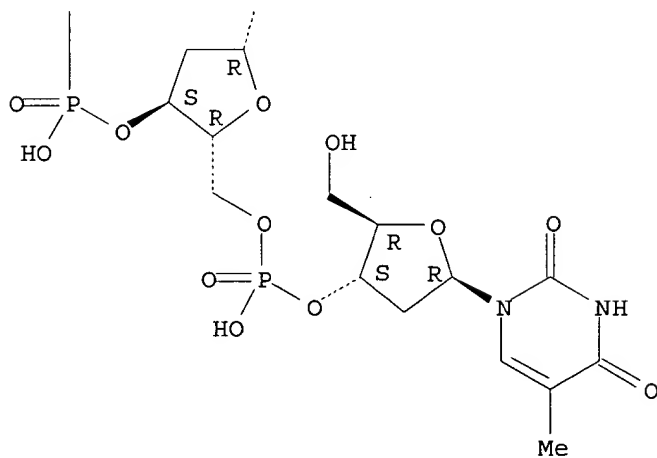
PAGE 1-A



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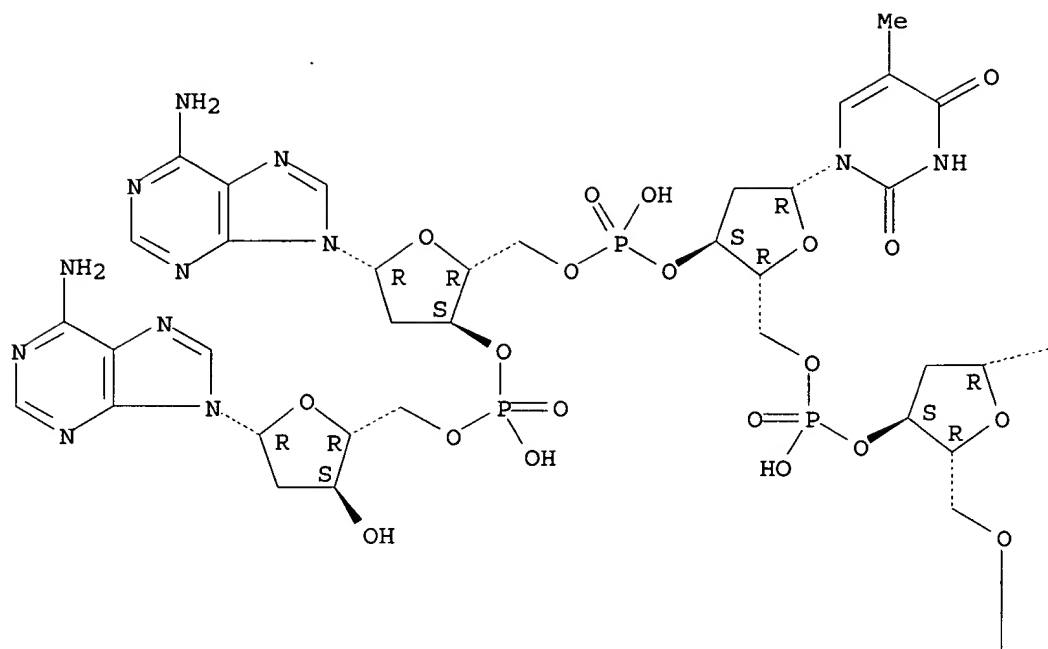
CM 2

CRN 89802-96-0

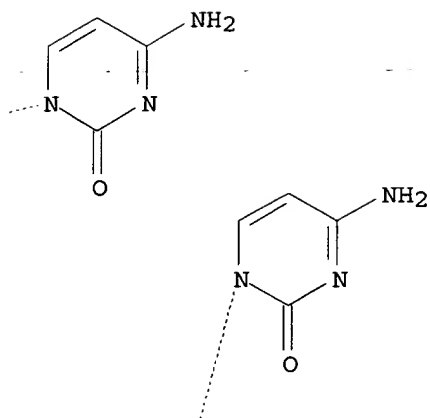
CMF C57 H74 N21 O33 P5

Absolute stereochemistry.

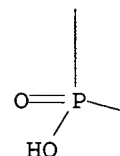
PAGE 1-A



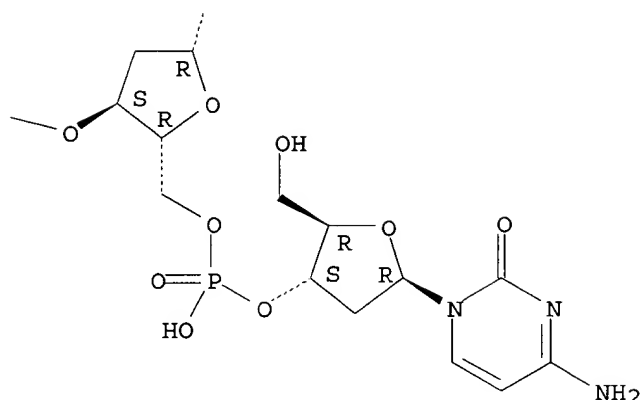
PAGE 1-B



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PAGE 2-B



L46 ANSWER 10 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:689159 CAPLUS

DOCUMENT NUMBER: 128:917

TITLE: Functional analysis of the promoter for the human CYP1B1 gene

AUTHOR(S): Wo, Yu-Yuan P.; Stewart, Jane; Greenlee, William F.

CORPORATE SOURCE: Department of Molecular Pharmacology and Medicinal Chemistry, Purdue University, West Lafayette, IN, 47907, USA

SOURCE: Journal of Biological Chemistry (1997), 272(42), 26702-26707

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 31 Oct 1997

AB Our laboratory has previously cloned the cDNA for human CYP1B1, a new member of the cytochrome P 450 superfamily. Here, we report on the mapping and function of the CYP1B1 promoter. The CYP1B1 promoter is fully functional, when it is uncoupled from upstream enhancer elements. Deletion anal. and site-directed mutagenesis identified four regulatory elements required for maximum promoter activity: two antisense Sp1 sites (-84 to -89 and -68 to -73), a TATA-like box (-34 to -29), and an initiator motif (-5 to +3). The initiator and the TATA-like elements are both required for basal promoter activity, with enhanced activity mediated by the two antisense Sp1 elements. The CYP1B1 initiator was demonstrated by in vitro transcription anal. to be a positioning element that maintained fidelity of transcription from a single site. Specific binding to a CYP1B1 initiator probe by human nuclear extract proteins was competed either by the

highly homologous murine terminal deoxynucleotidyl transferase initiator or, to a lesser extent, by the adenovirus major late initiator. Taken together, these results indicate that the structure and function of the CYP1B1 promoter confers constitutive expression of the gene and assures fidelity of transcription initiation from a single site. The CYP1B1 promoter is distinct from the promoters of the closely related cytochrome P450s CYP1A1 and CYP1A2 and is structurally and functionally similar to the promoters of constitutively expressed genes and at least two viruses.

IT 188643-00-7

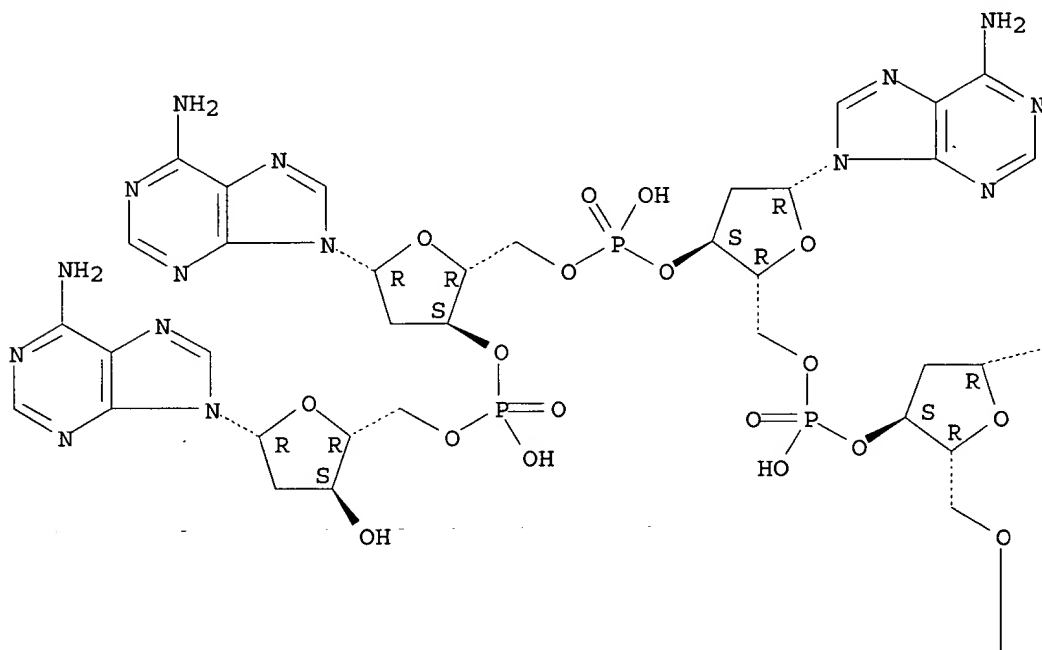
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; functional anal. of the promoter for the human CYP1B1 gene, identification of four regulatory elements required for maximum promoter activity)

RN 188643-00-7 CAPLUS

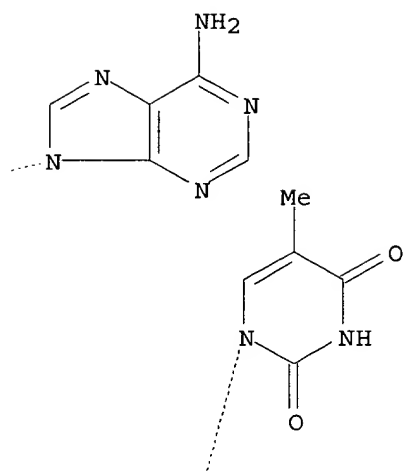
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

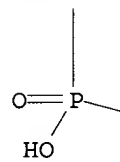
PAGE 1-A



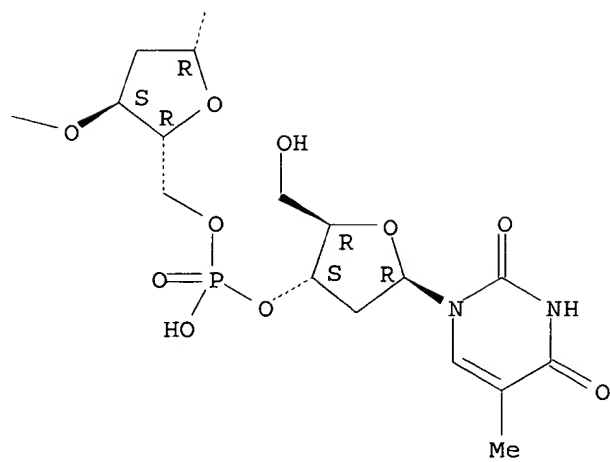
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REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:758163 CAPLUS

DOCUMENT NUMBER: 128:112183

TITLE: Superactive oligonucleotide derivatives

AUTHOR(S): Sergeyev, D. S.; Vorobjev, P. E.; Zarytova, V. F.

CORPORATE SOURCE: Siberian Division of RAS, Novosibirsk Institute of Bioorganic Chemistry, Novosibirsk, 630090, Russia

SOURCE: Nucleosides & Nucleotides (1997), 16(7-9), 1575-1577

CODEN: NUNUD5; ISSN: 0732-8311

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Dec 1997

AB The conjugate of antitumor antibiotic bleomycin A5 with the tetranucleotide catalytically cleaves 20-mer ssDNA target in the presence of flanking octanucleotides. Each mol. of the conjugate cleaves, on average, three mols. of the target.

IT 177079-71-9

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); BIOL (Biological study)

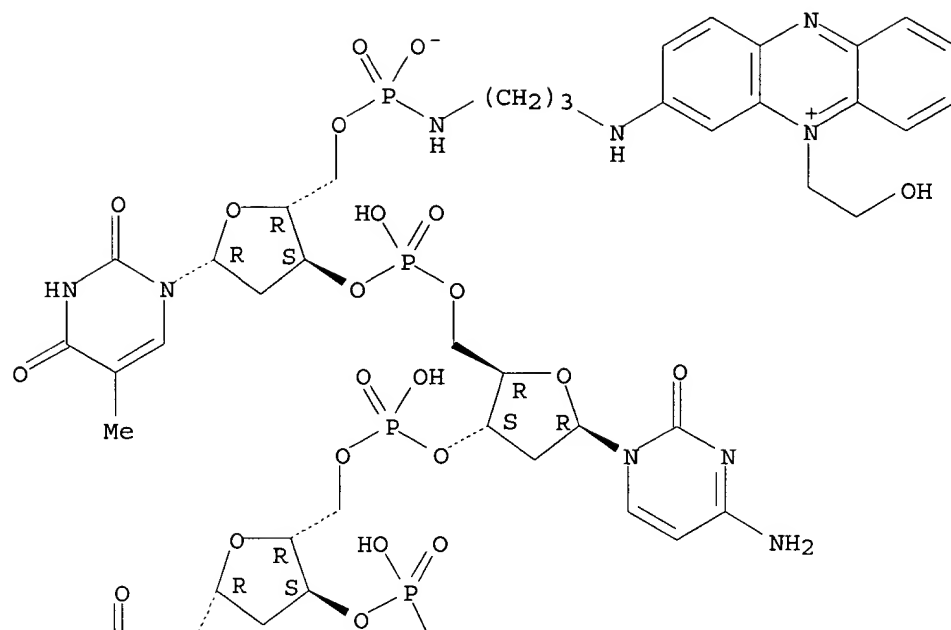
(effector; site-specific DNase activity of bleomycin A5-oligonucleotide conjugate)

RN 177079-71-9 CAPLUS

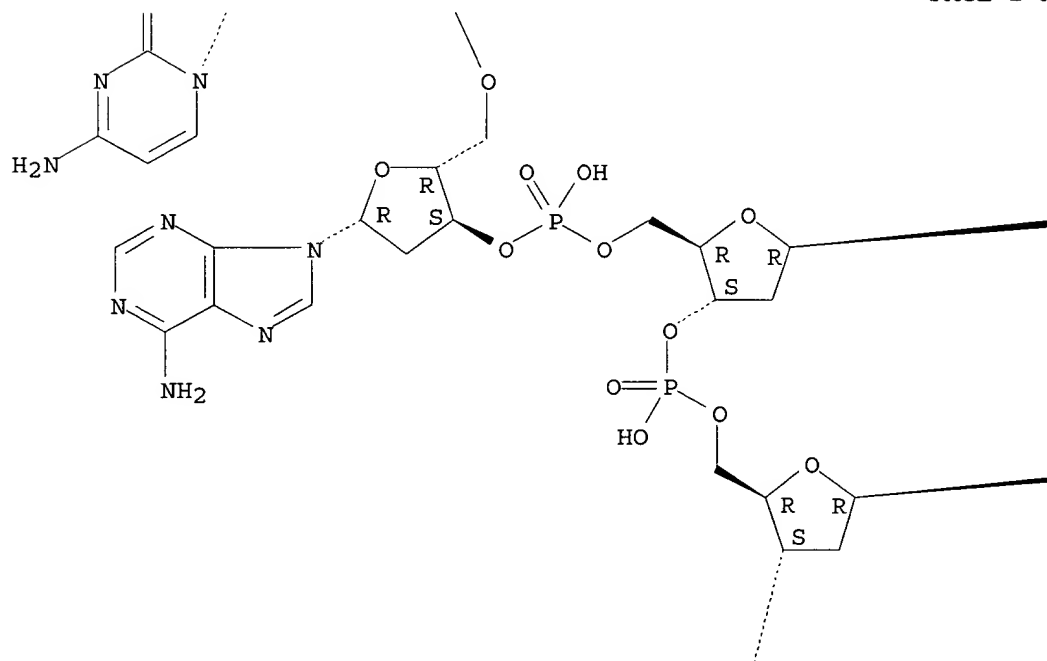
CN 3'-Adenylic acid, 5'-O-[hydroxy[[3-[[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-, 3'-[2-[[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

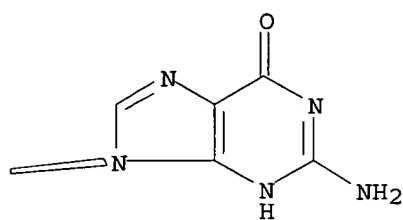
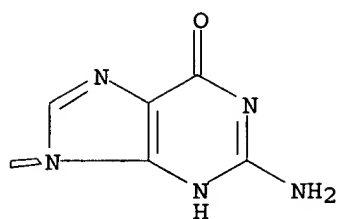
PAGE 1-A



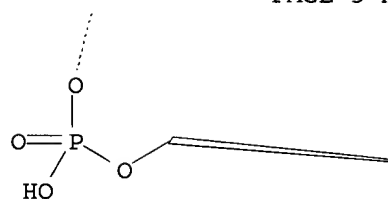
PAGE 2-A



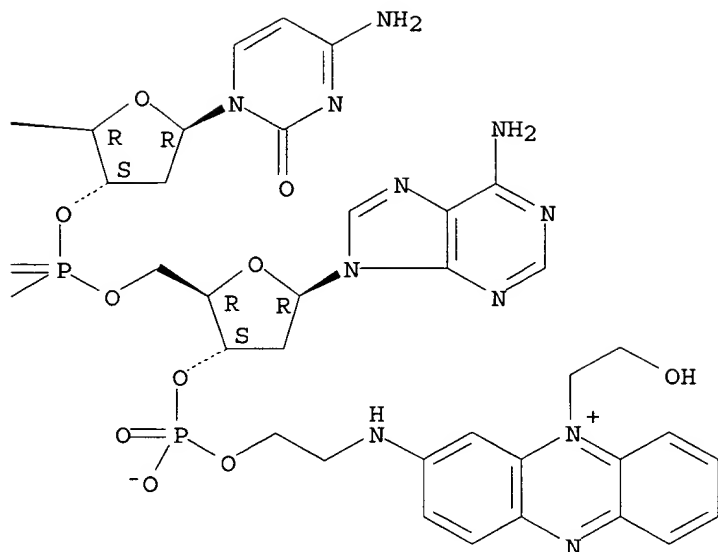
PAGE 2-B



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REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:758153 CAPLUS

DOCUMENT NUMBER: 128:112002

TITLE: Mini-antisense oligonucleotides

AUTHOR(S): Pyshnyi, D. V.; Pyshnaya, I. A.; Lokhov, S. G.;
Ivanova, E. M.; Zarytova, V. F.

CORPORATE SOURCE: Siberian Division of RAS, Novosibirsk Institute of
Bioorganic Chemistry, Novosibirsk, 630090, Russia

SOURCE: Nucleosides & Nucleotides (1997), 16(7-9), 1565-1569

CODEN: NUNUD5; ISSN: 0732-8311

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Dec 1997

AB A new strategy of selective DNA target modification was proposed. The using of reactive derivs. of short oligonucleotides in the presence of flanking effector pair allows one to modify DNA target only when the perfect complementary complex of DNA target and oligonucleotide tandem is formed.

IT 177079-71-9 197095-57-1

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); BIOL (Biological study)

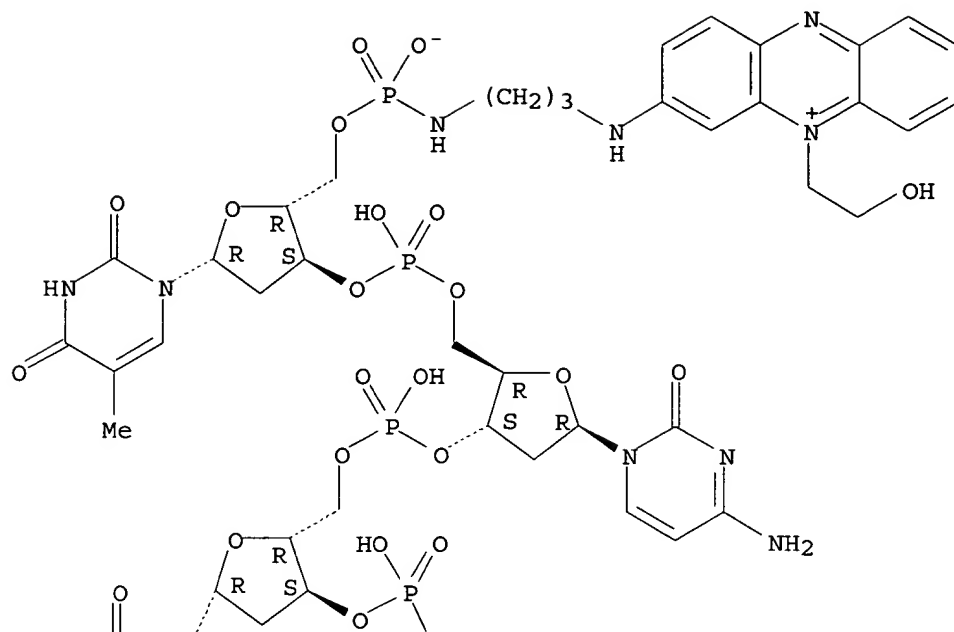
(short oligonucleotides in the presence of flanking effector pair modifies DNA target)

RN 177079-71-9 CAPLUS

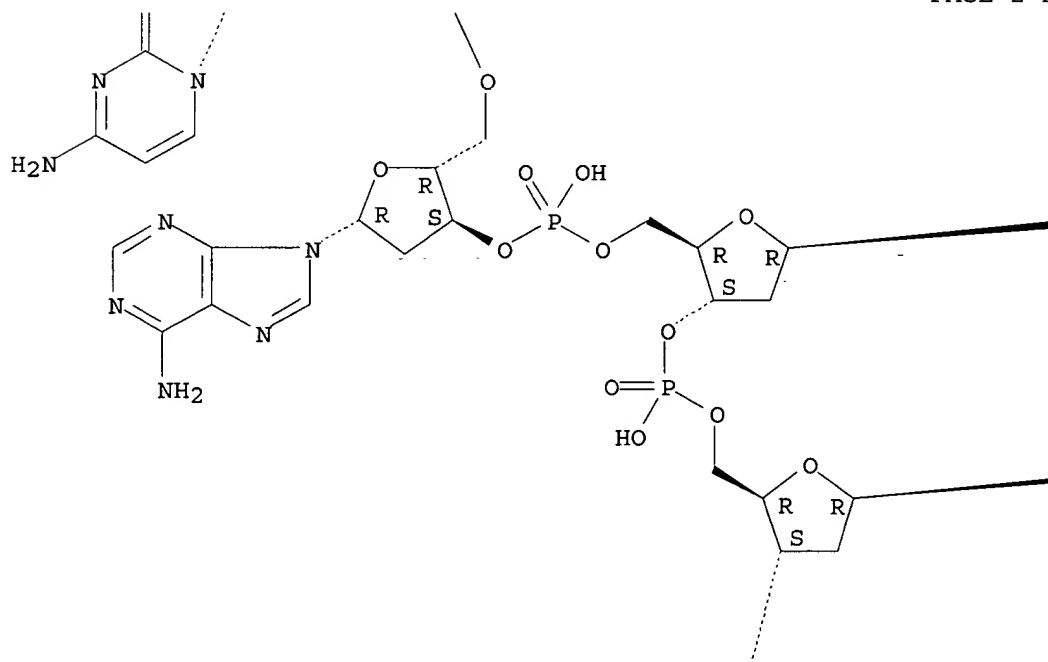
CN 3'-Adenylic acid, 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

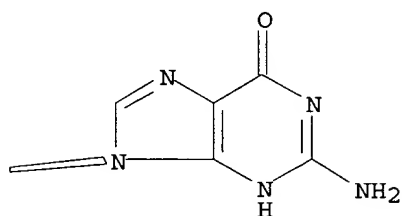
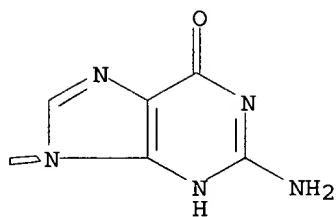
PAGE 1-A



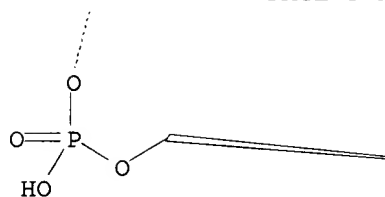
PAGE 2-A



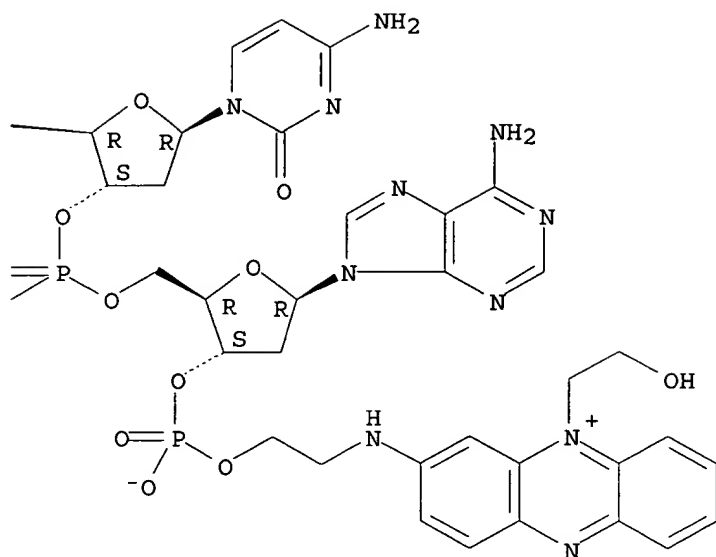
PAGE 2-B



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PAGE 3-B

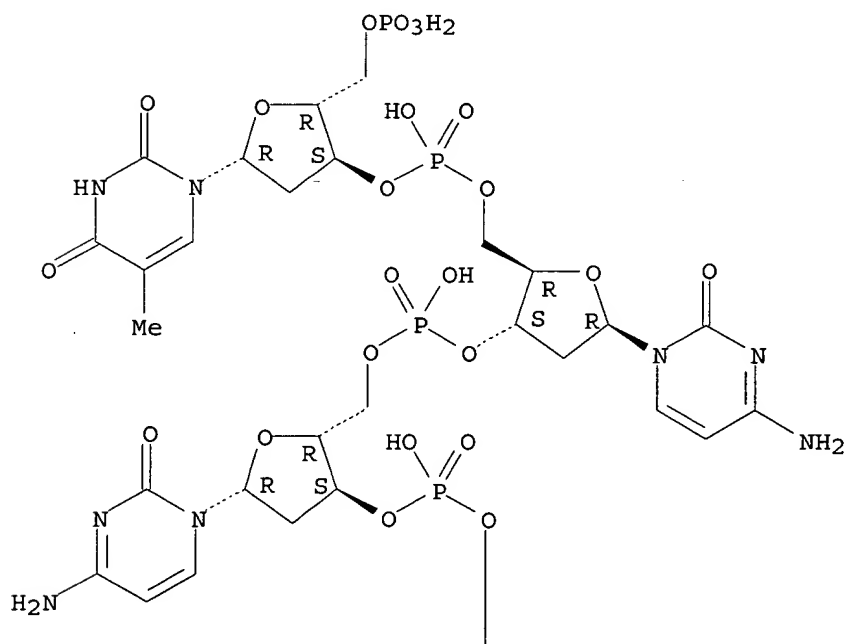


RN 197095-57-1 CAPLUS

CN Adenosine, 5'-O-phosphonothymidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

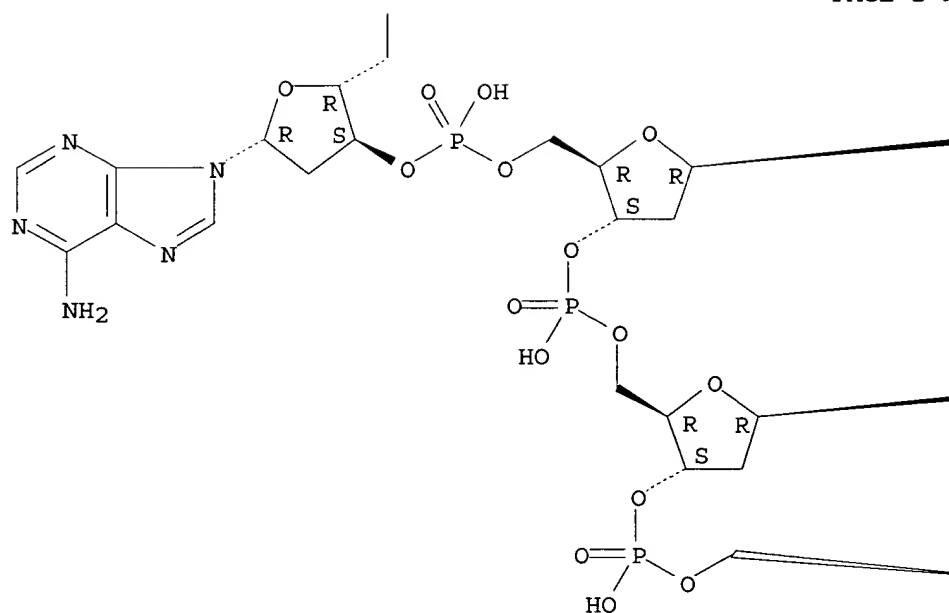
PAGE 1-A



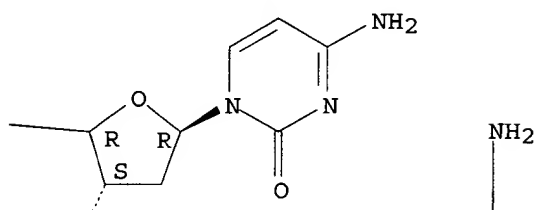
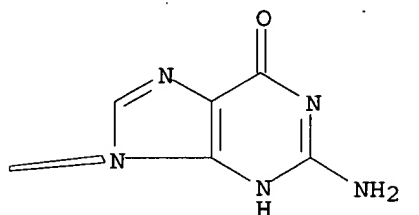
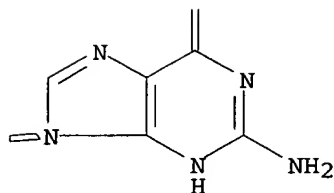
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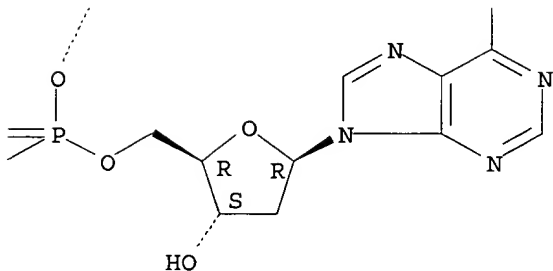
PAGE 2-B



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REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

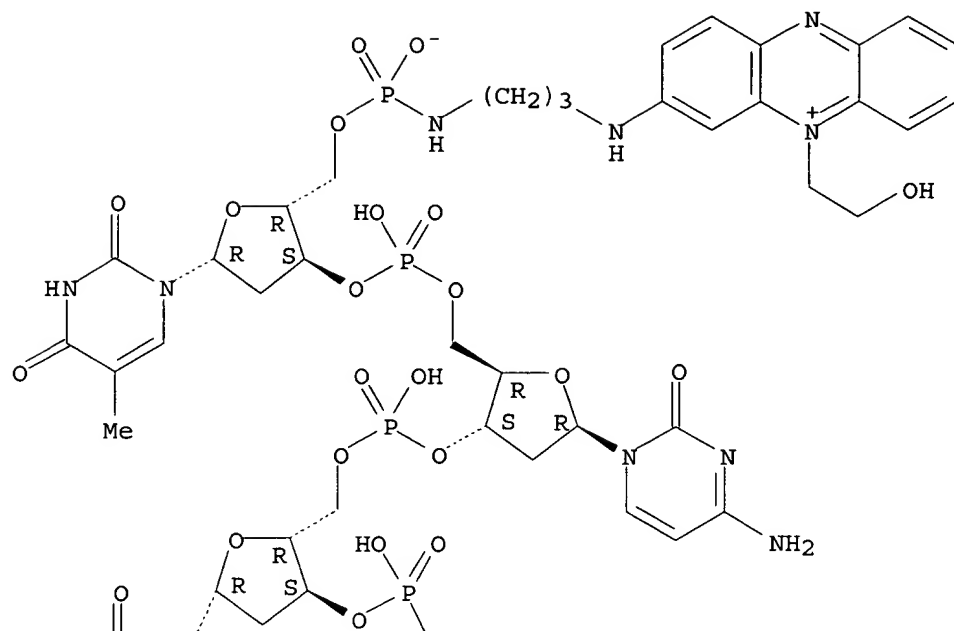
L46 ANSWER 13 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:148456 CAPLUS

Searched by Barb O'Bryen, STIC 2-2518

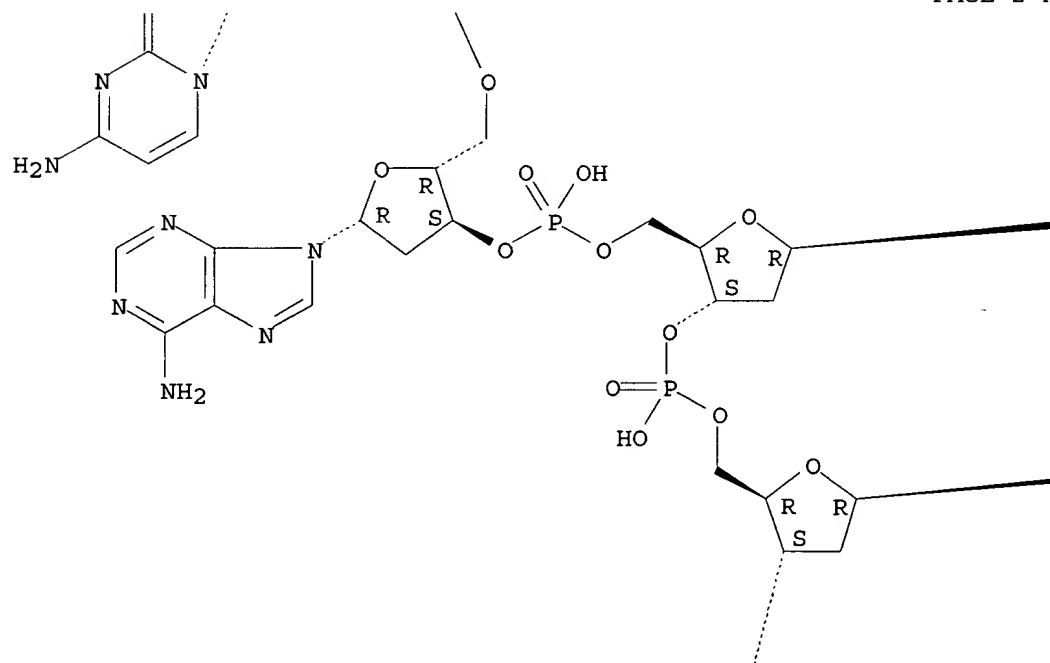
DOCUMENT NUMBER: 128:318408
TITLE: Interaction of short oligonucleotide derivatives with nucleic acids. IV. Modification of DNA by an alkylating tetranucleotide reagent in the presence of effectors in perfect and imperfect complexes
AUTHOR(S): Pyshnyi, D. V.; Pyshnava, I. A.; Lokhov, S. G.; Ivanova, E. M.; Zarytova, V. F.
CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry, Siberian Division, Russian Academy of Sciences, Novosibirsk, 630090, Russia
SOURCE: Bioorganicheskaya Khimiya (1997), 23(11), 895-902
CODEN: BIKHD7; ISSN: 0132-3423
PUBLISHER: MAIK Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 128:318408
ED Entered STN: 12 Mar 1998
AB It was demonstrated that any mismatches in a complex formed by an ssDNA target and a tetranucleotide at 25 or 37° can be discriminated by alkylating the DNA with a tetranucleotide carrying a 4-[N-methyl-N-(2-chloroethyl)]aminobenzylethylamine residue at the 5'-terminal phosphate in the presence of a pair of flanking effectors, octanucleotide di-N-(2-hydroxyethyl)-phenazinium derivs. The discrimination factor (ratio of the extent of the target modification in the perfect and mismatch-containing complexes) for a single mismatch in the tetranucleotide binding site at 25° varied between 4 and 500 depending on the type of mismatch and its location in the complex and exceeded 400 at 37° for all the investigated mismatches. The DNA target modification by the alkylating derivative of the 3'-estrone ester of tetranucleotide pCAGX(X = C, T, A or G) was selective in the presence of a pair of hydrophobic effectors, octanucleotide 5'-cholesteryl-3'-phenazinium derivs. The discrimination factors for 3'-terminal mismatches T·G, A·G, and G·G were 1,8,400, and 400, resp.
IT 177079-71-9P 204335-58-0P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(interaction of short oligonucleotide derivs. with nucleic acids)
RN 177079-71-9 CAPLUS
CN 3'-Adenylic acid, 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

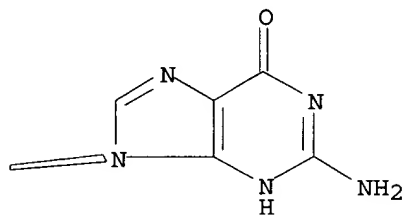
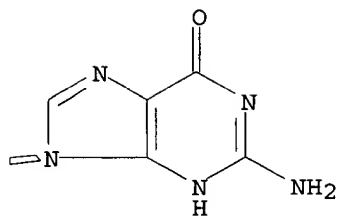
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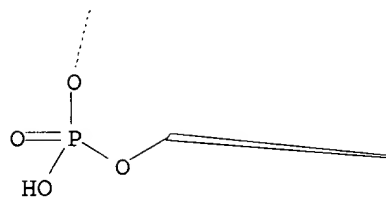
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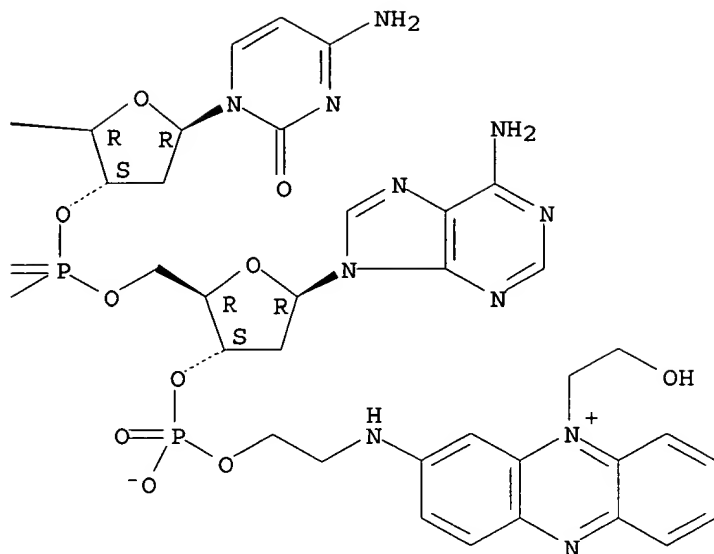
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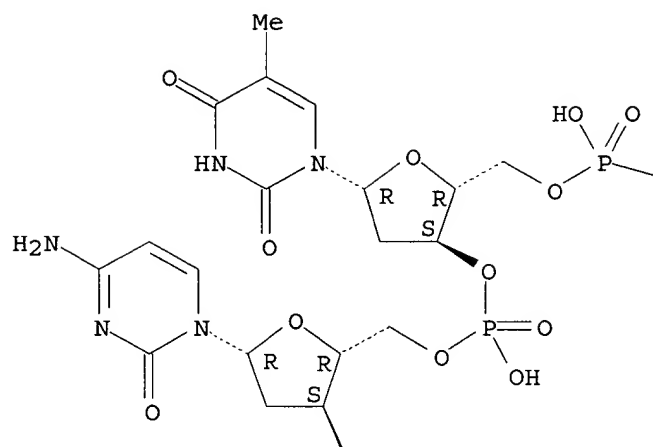


RN 204335-58-0 CAPLUS

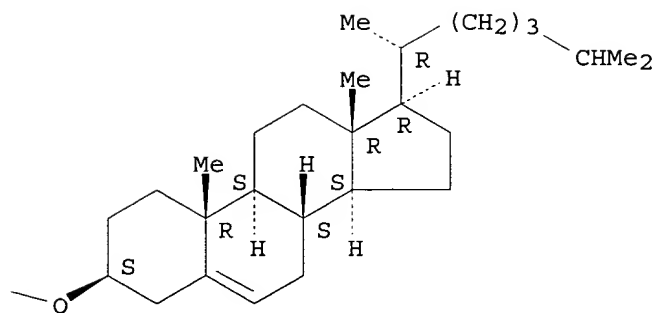
CN 3'-Adenylic acid, 5'-O-[[[(3 β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxy-, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

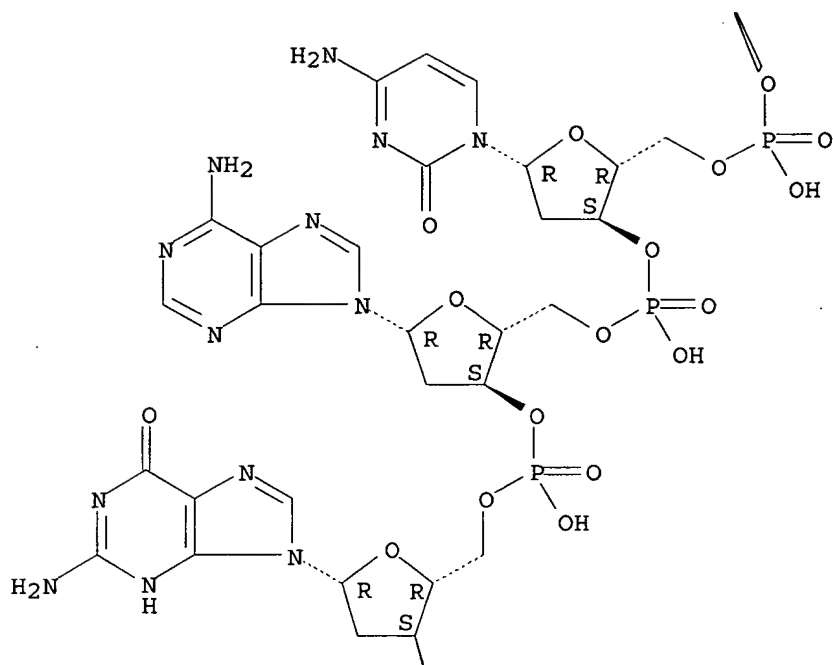
PAGE 1-A



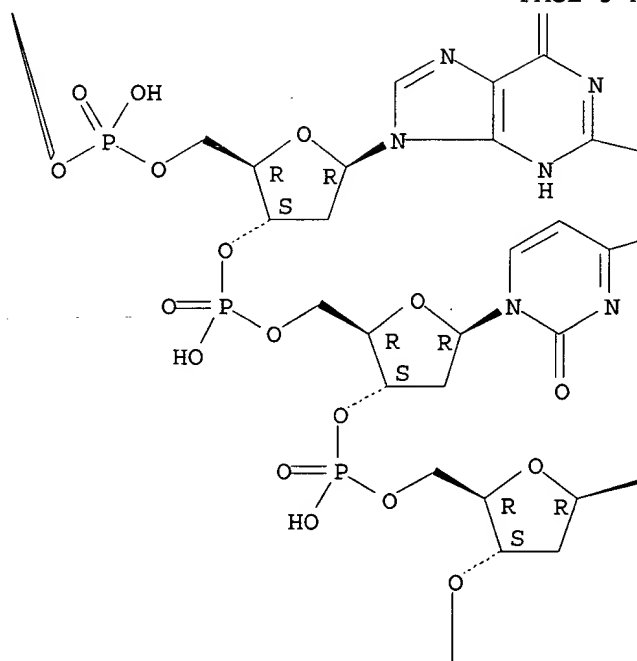
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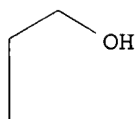
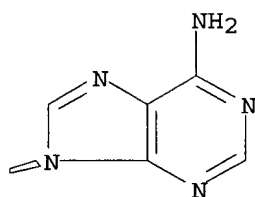
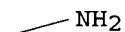
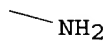
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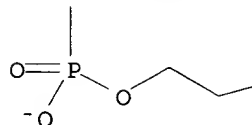
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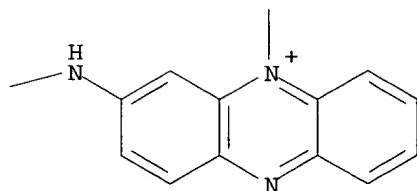
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IT 206977-68-6 206977-69-7 206977-71-1
 206977-82-4 206977-84-6 206977-86-8
 206977-87-9 206977-88-0 206977-89-1
 206977-95-9 206978-00-9 206978-01-0
 206978-02-1 206978-07-6 206978-08-7
 206978-09-8 206978-11-2

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
 (interaction of short oligonucleotide derivs. with nucleic acids)

RN 206977-68-6 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-3'-adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

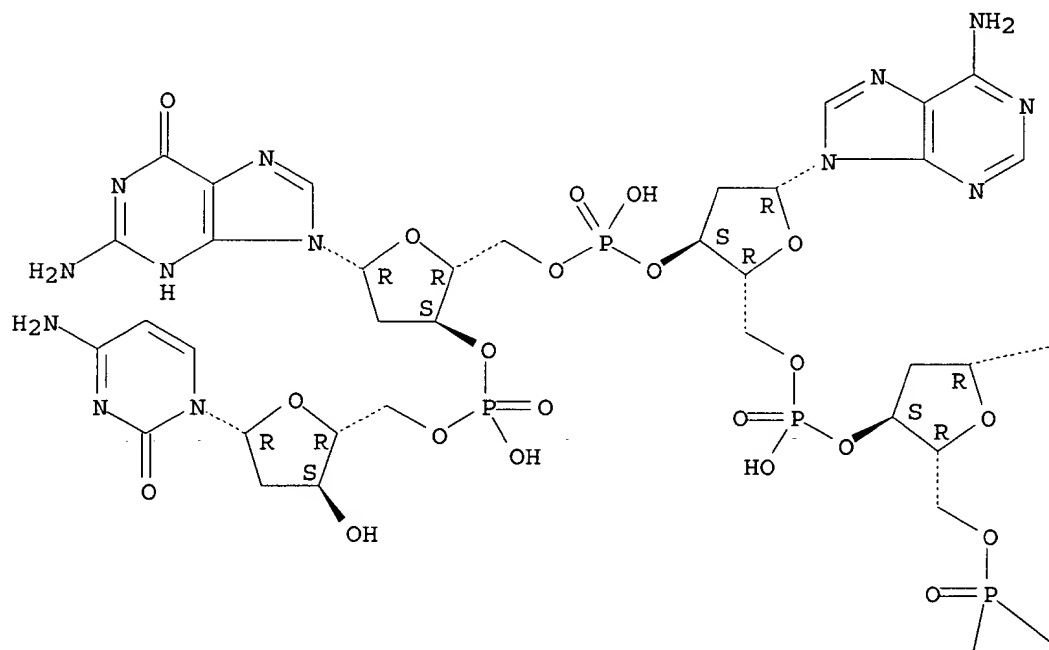
CM 1

CRN 197095-65-1

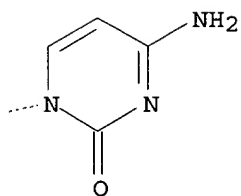
CMF C49 H65 Cl N18 O23 P4

Absolute stereochemistry.

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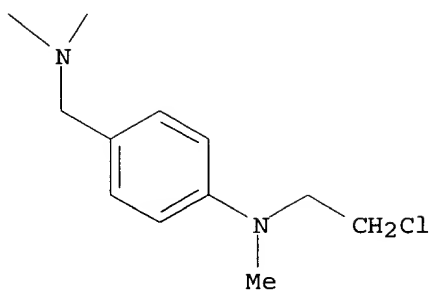


Me

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HO

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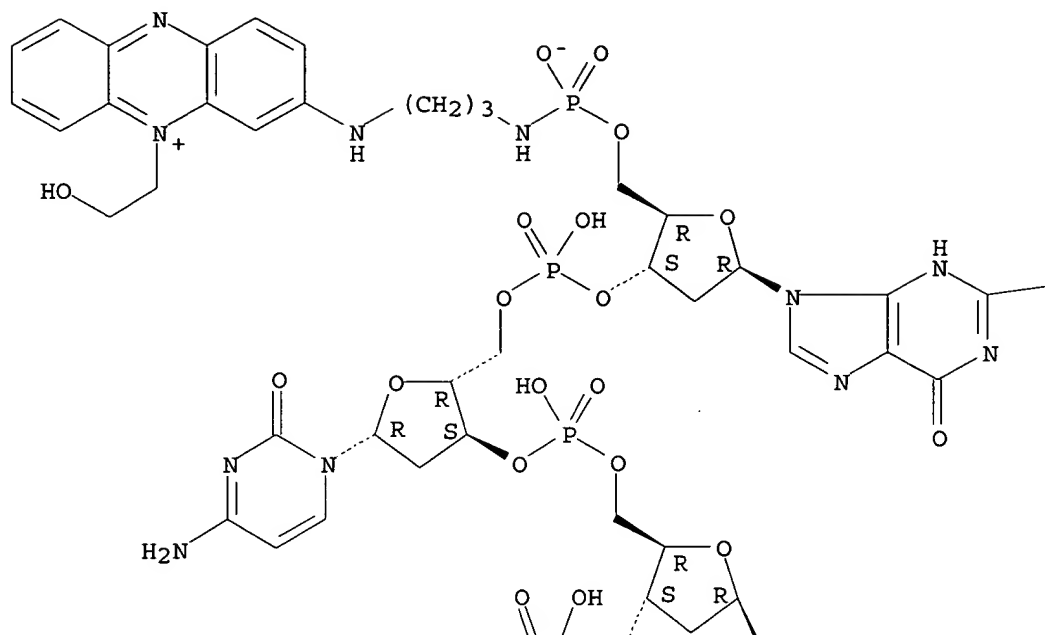
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CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

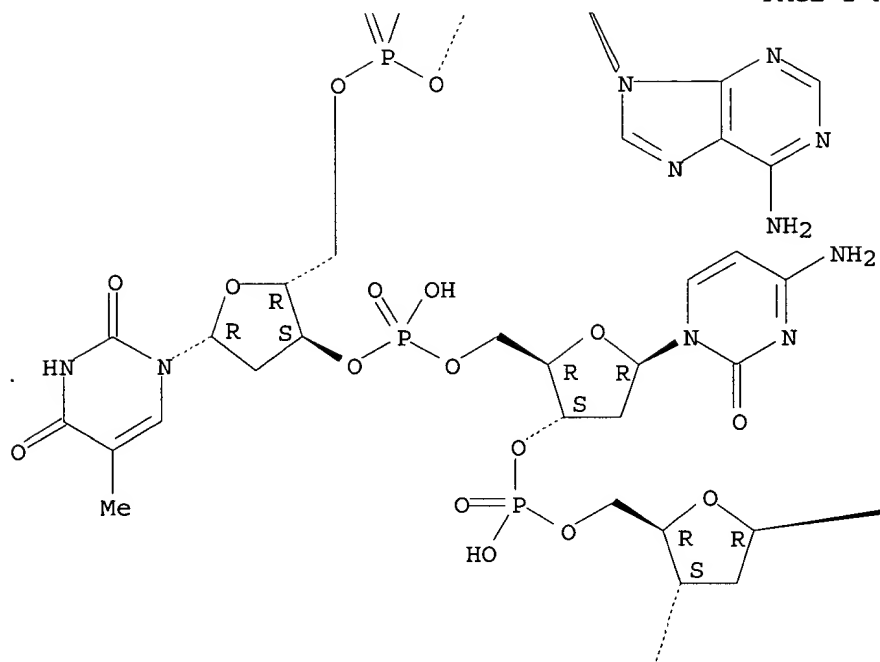
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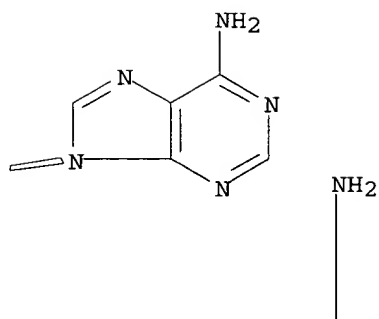
PAGE 1-B

NH₂

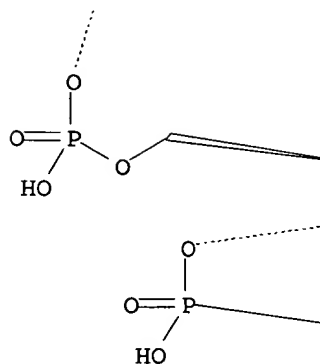
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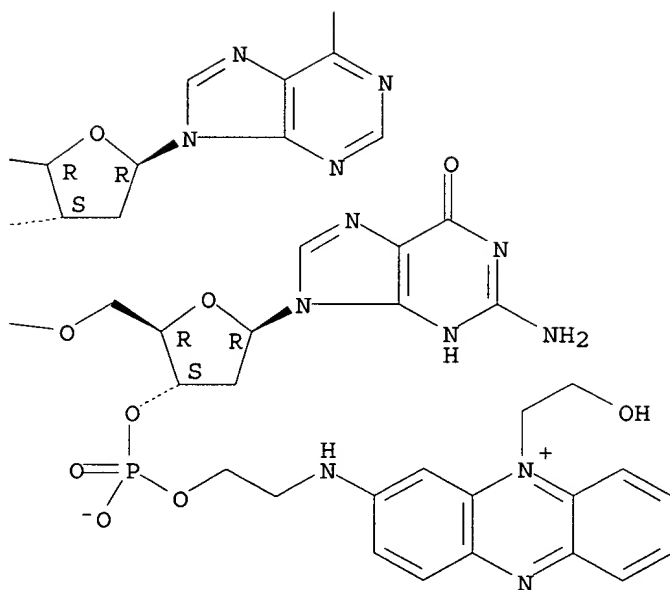
PAGE 2-B



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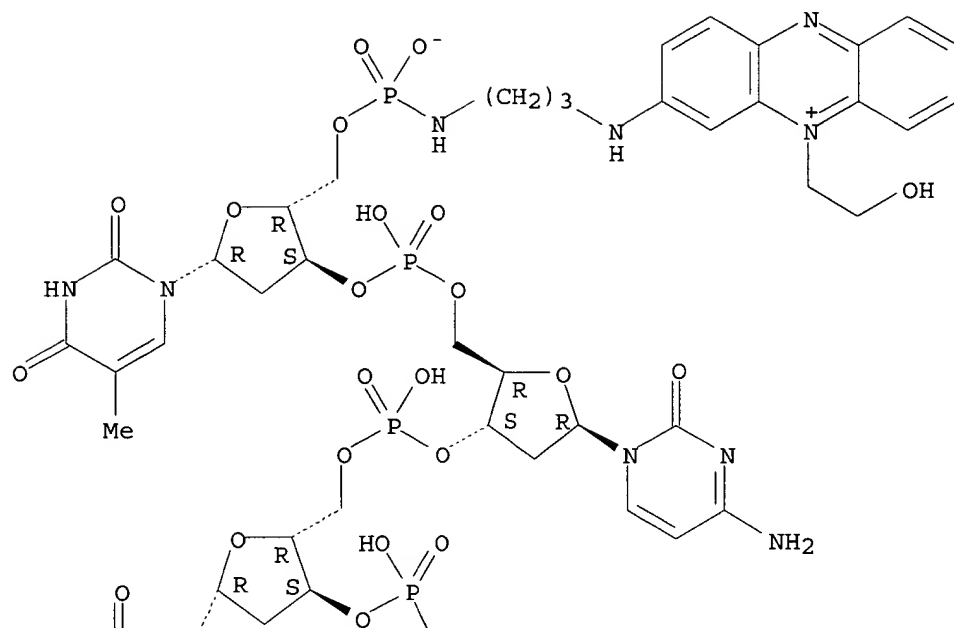
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CRN 177079-71-9

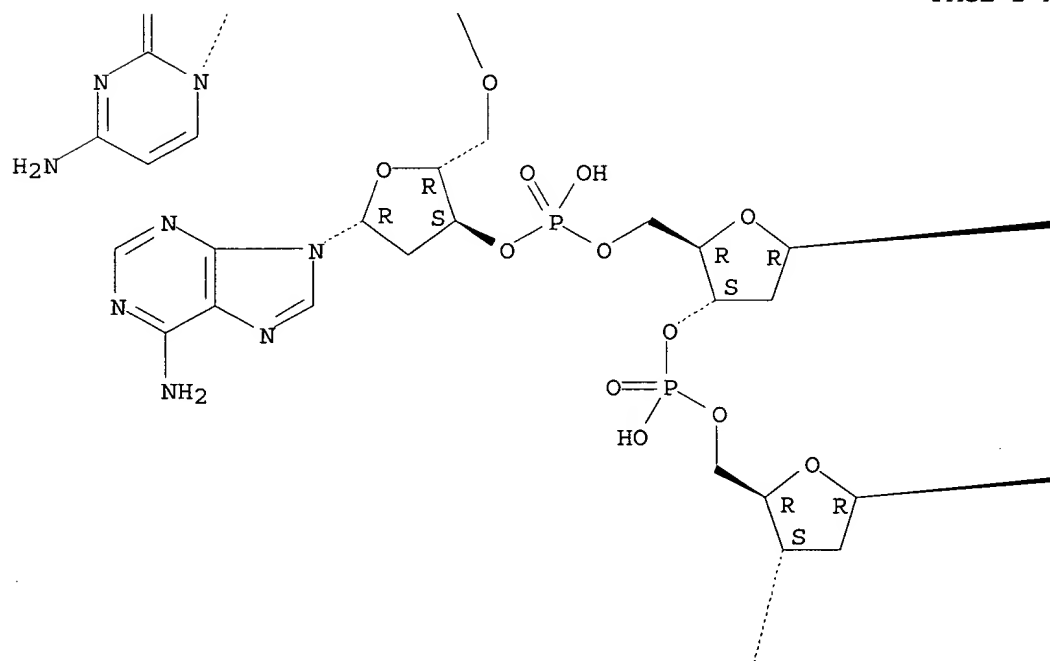
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

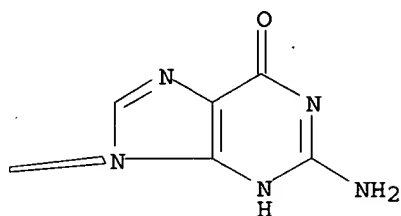
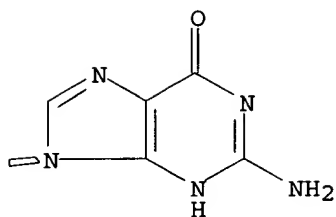
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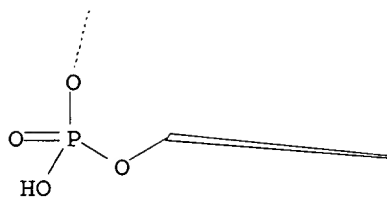
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The chemical structure is a complex molecule featuring three main ring systems connected by various linkages. At the top, a pyridine ring with an amino group (NH₂) at the 2-position is connected via its nitrogen atom to a carbonyl group (C=O). This carbonyl is part of a five-membered ring containing an oxygen atom and two 'R' groups, one of which is labeled 'S'. This ring is further connected to a phosphonate group (P=O, O⁻) and a hydroxymethyl group (CH₂OH). The phosphonate group is also connected to a pyrazole ring system, which is further connected to a quinazolinium ring system. The quinazolinium ring system consists of a benzene ring fused to a pyrimidine ring, with a positive charge on the nitrogen atom. The pyrimidine ring is connected to a hydroxymethyl group (CH₂OH) and a phosphonate group (P=O, O⁻). The phosphonate group is also connected to a hydroxymethyl group (CH₂OH).

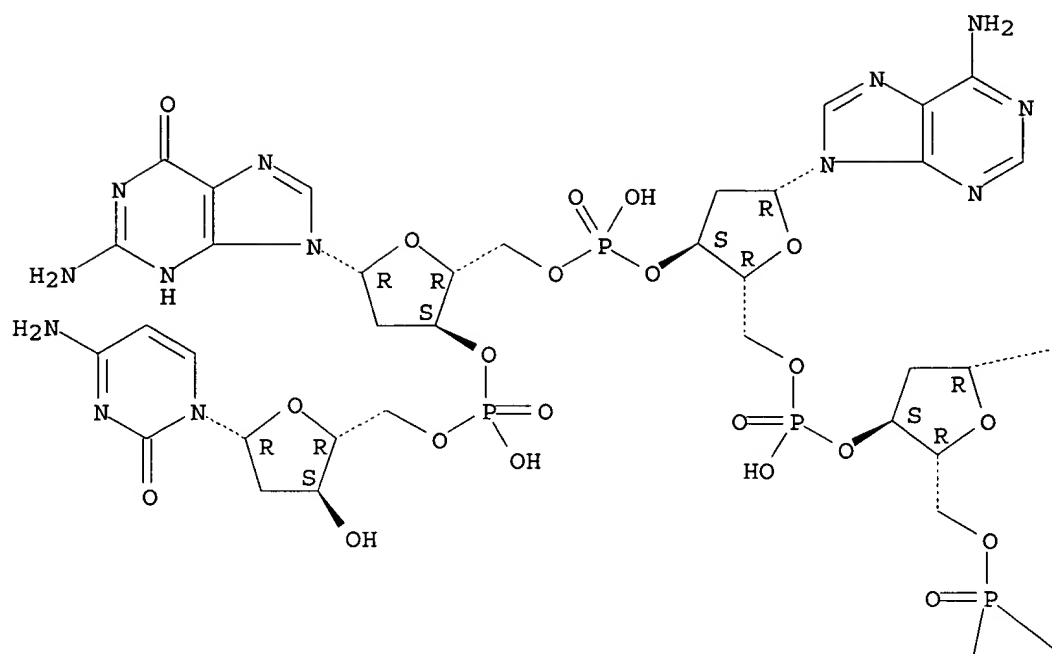
CRN 150227-65-9
CMF Unspecified
CCI MAN

| | | |
|----|---|--------|
| RN | 206977-69-7 | CAPLUS |
| CN | DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME) | |

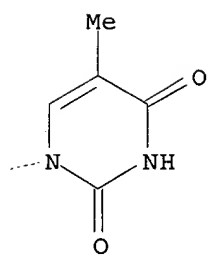
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CMF C50 H66 C1 N17 O24 P4

Searched by Barb O'Bryen, STIC 2-2518

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PAGE 1-B

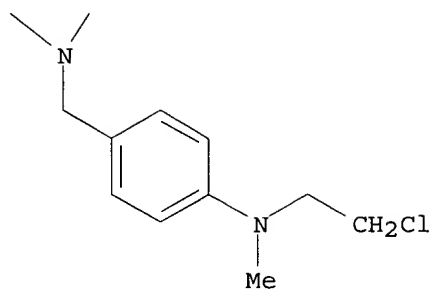


Me

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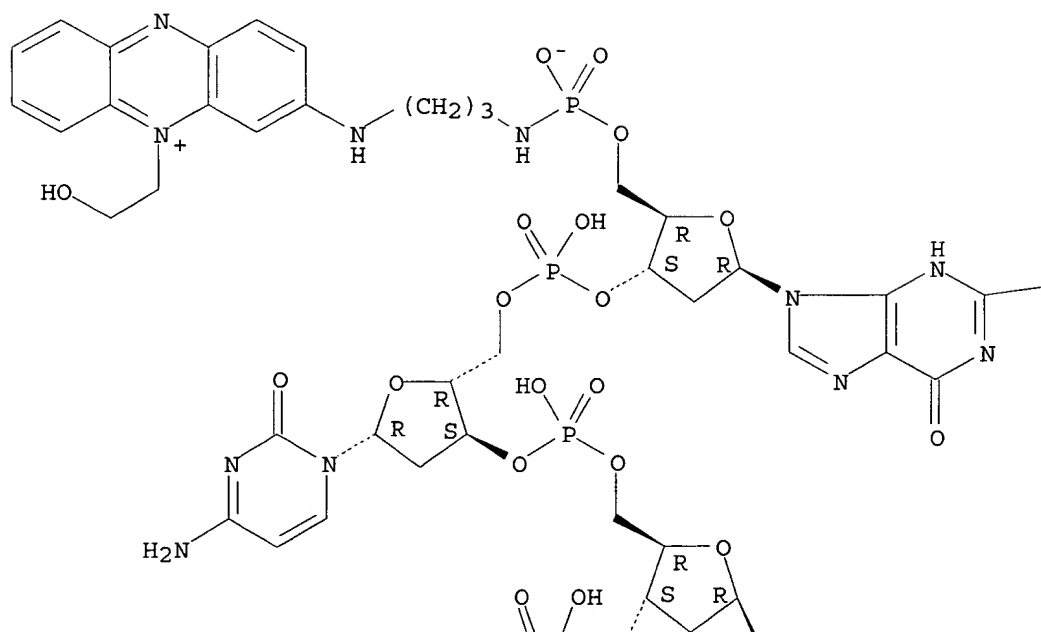
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CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

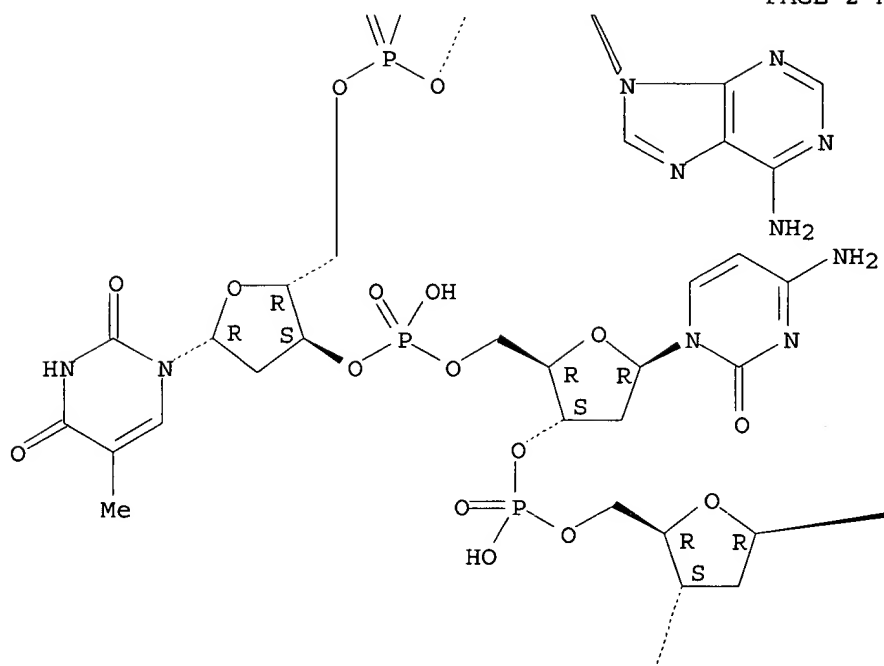
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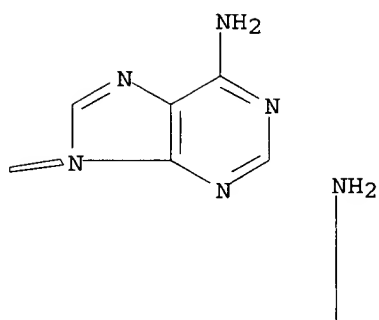
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NH₂

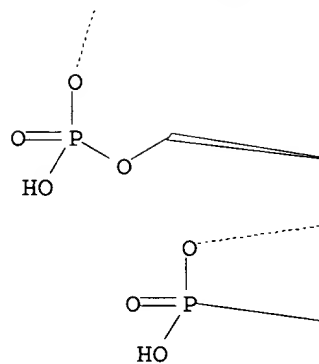
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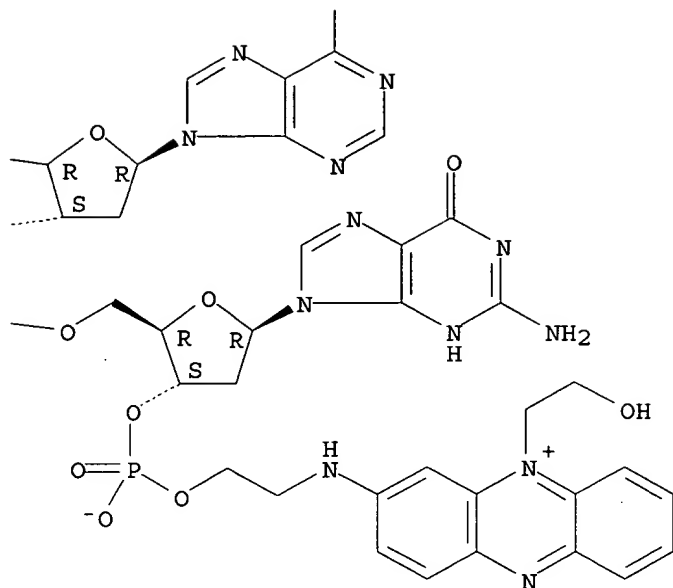
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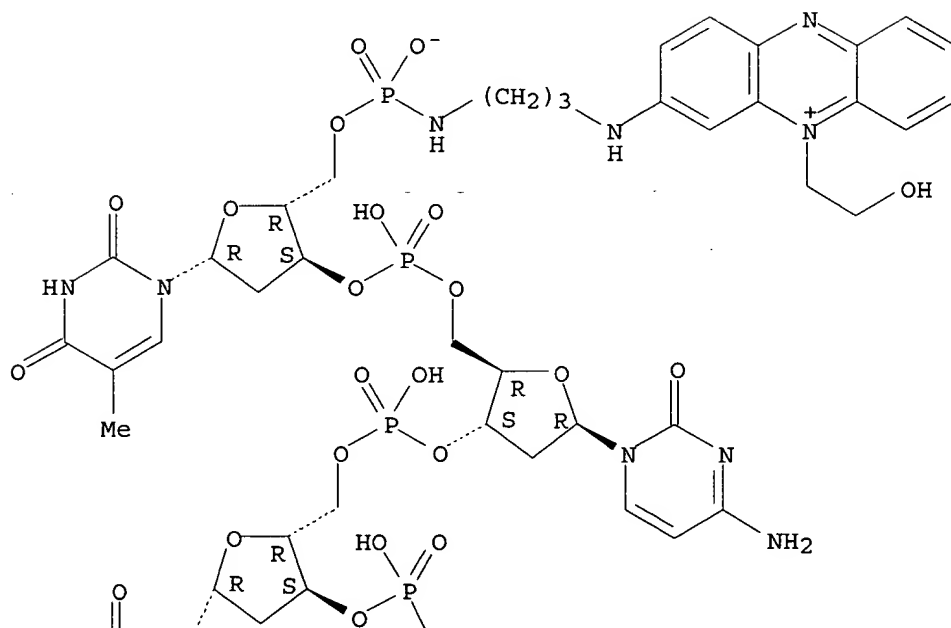
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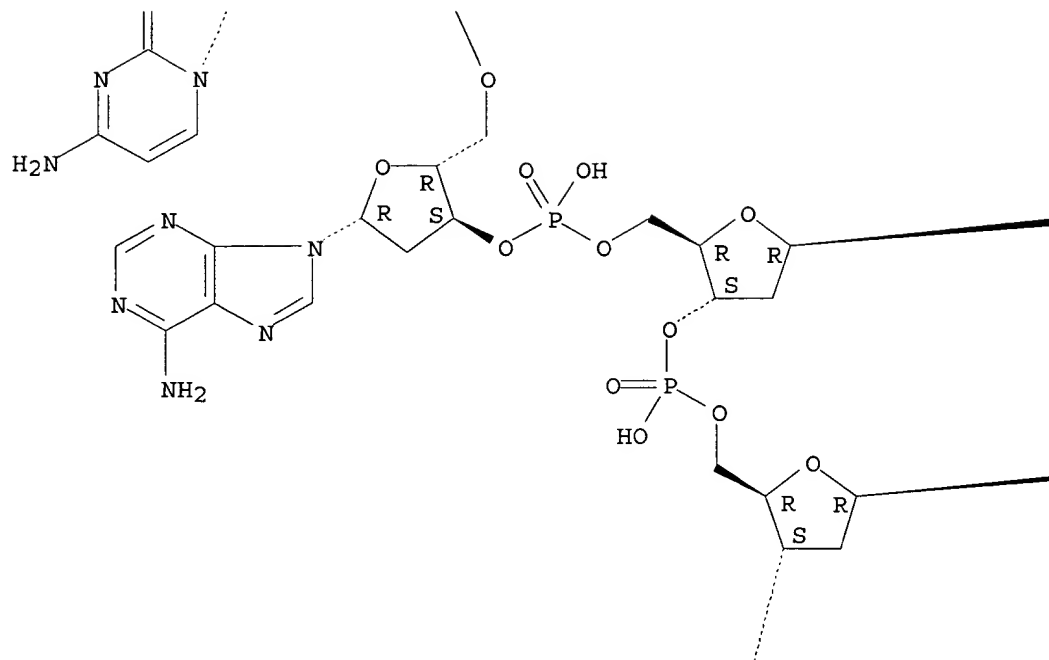
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

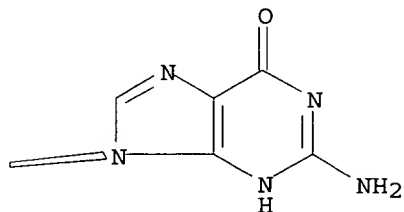
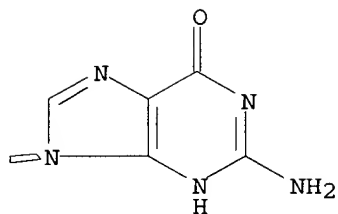
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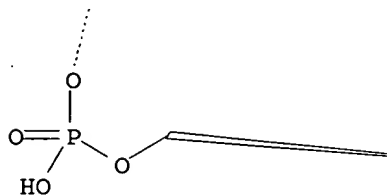
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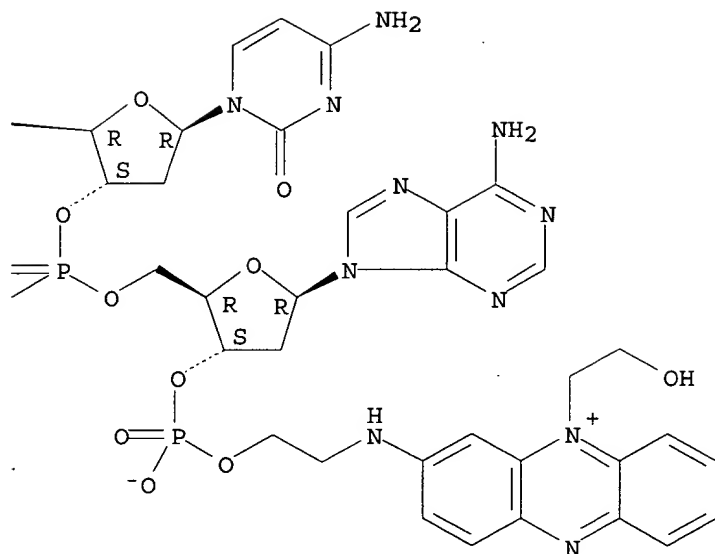
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CM 4

CRN 150227-65-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-71-1 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidyl-(3'→5')-

2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]
 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
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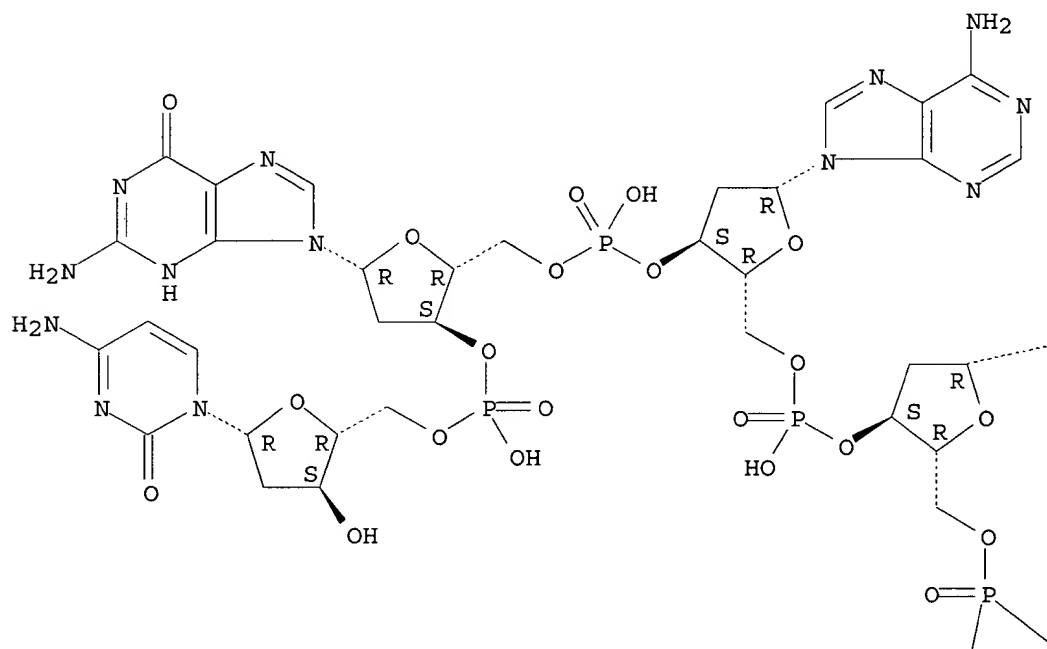
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CRN 206431-53-0

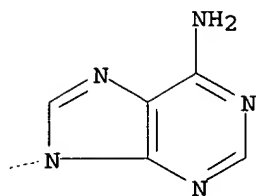
CMF C50 H65 Cl N20 O22 P4

Absolute stereochemistry.

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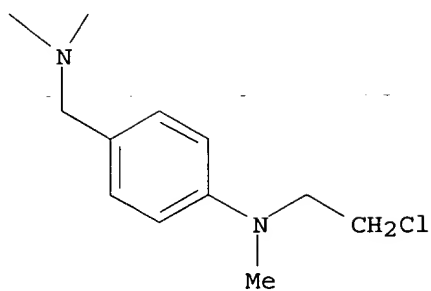


Me

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HO

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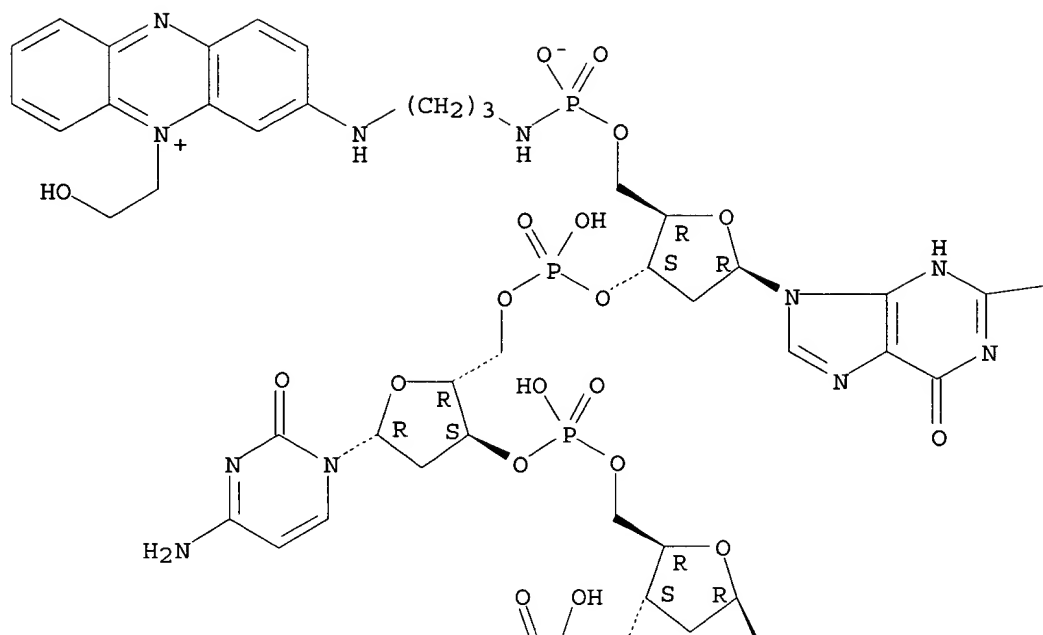
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

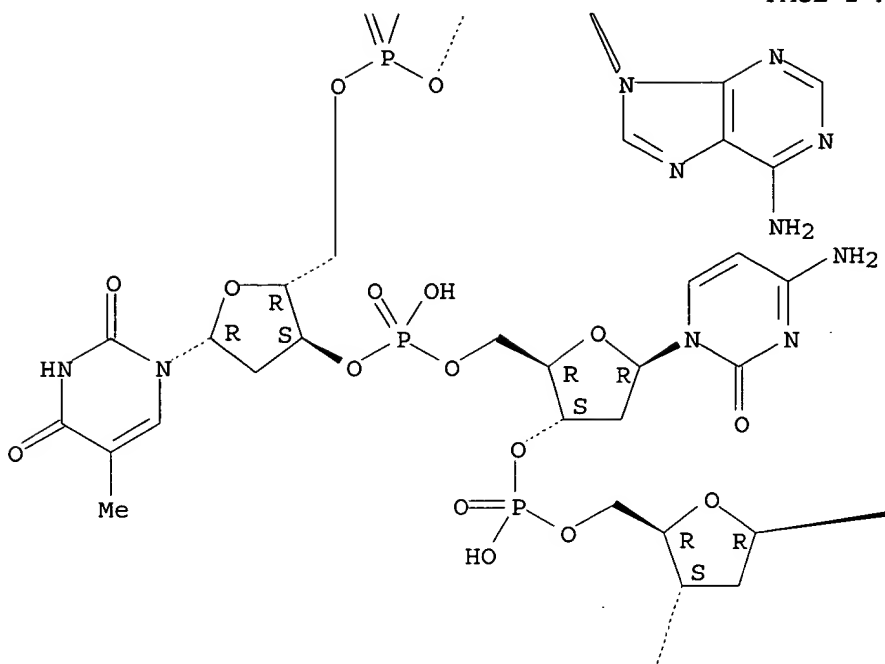
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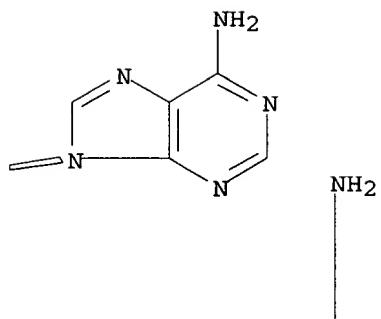
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NH₂

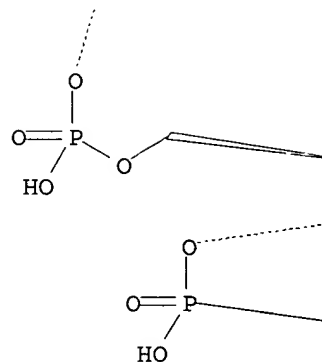
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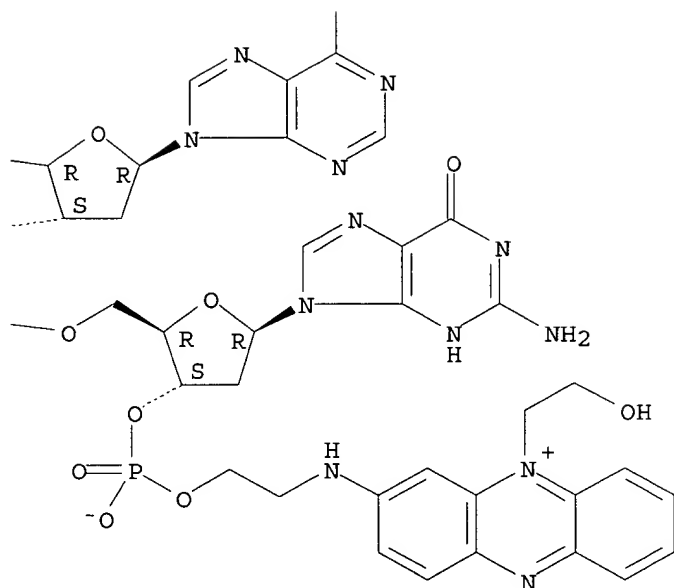
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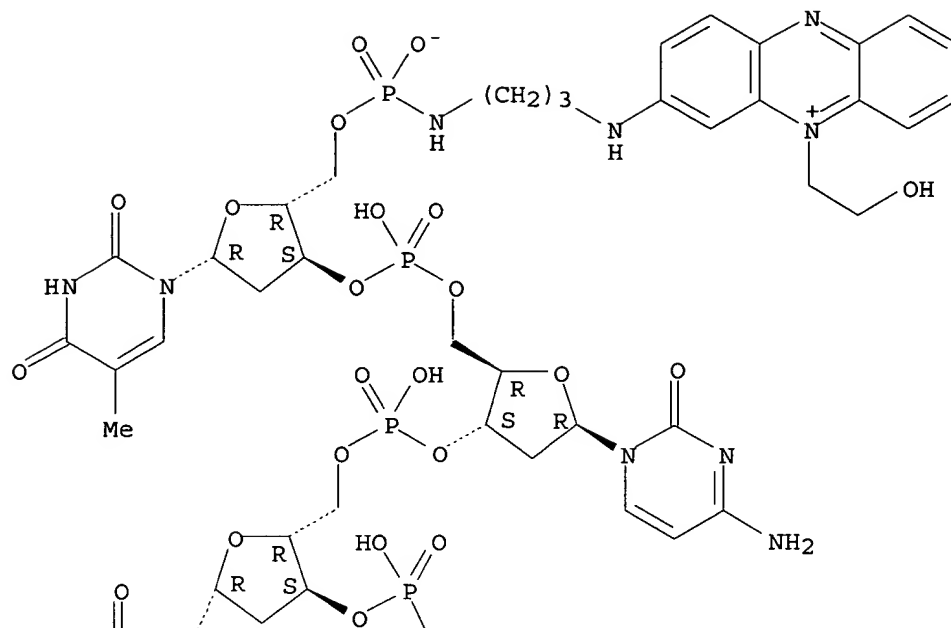
CM 3

CRN 177079-71-9

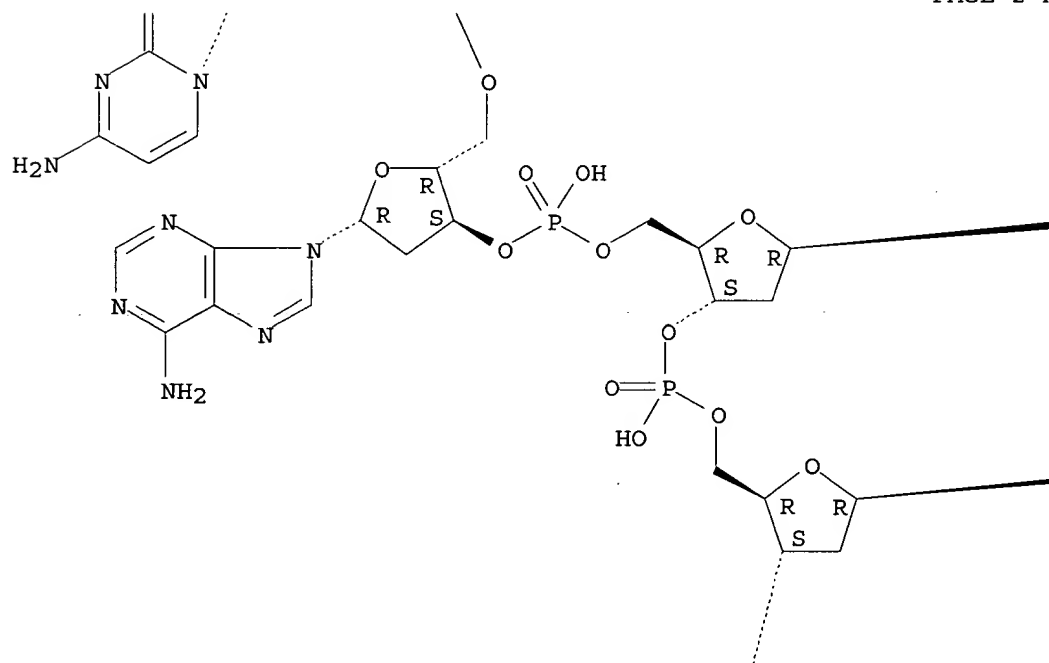
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

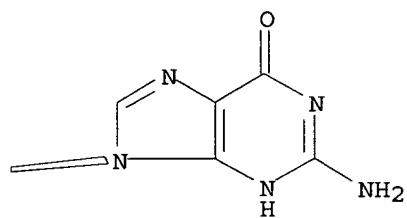
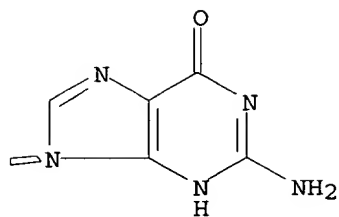
PAGE 1-A



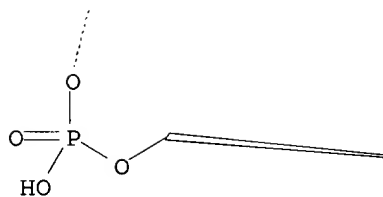
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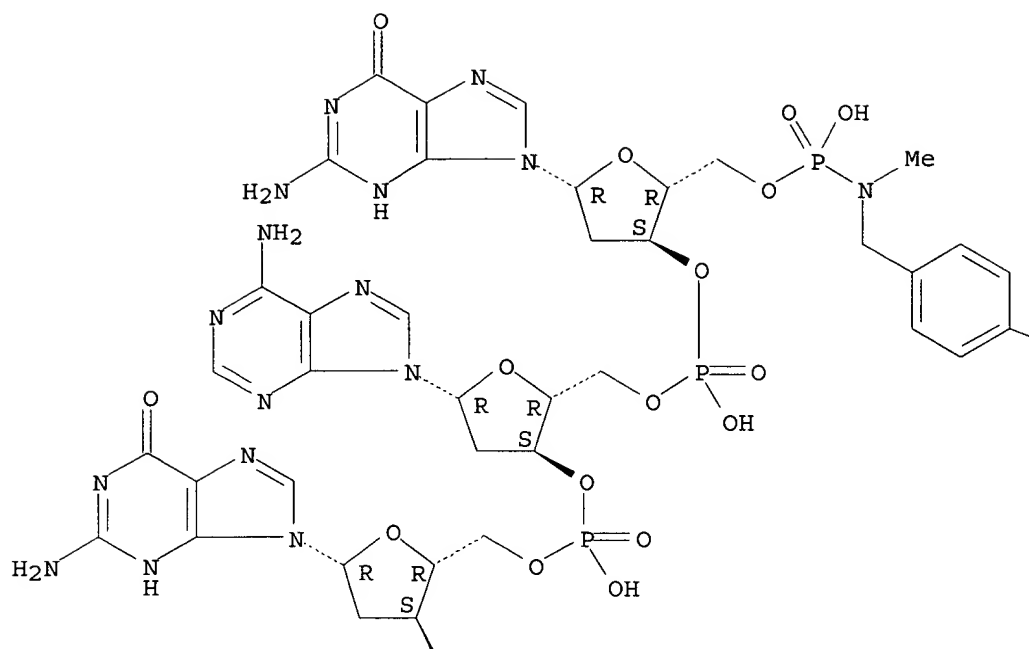
CRN 150227-65-9
CMF Unspecified
CCI MAN

RN 206977-82-4 CAPLUS
CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

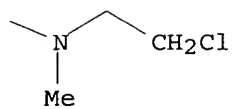
CRN 206431-55-2
CMF C50 H65 C1 N20 O23 P4

Searched by Barb O'Bryen, STIC 2-2518

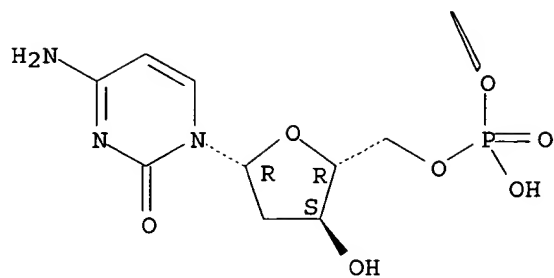
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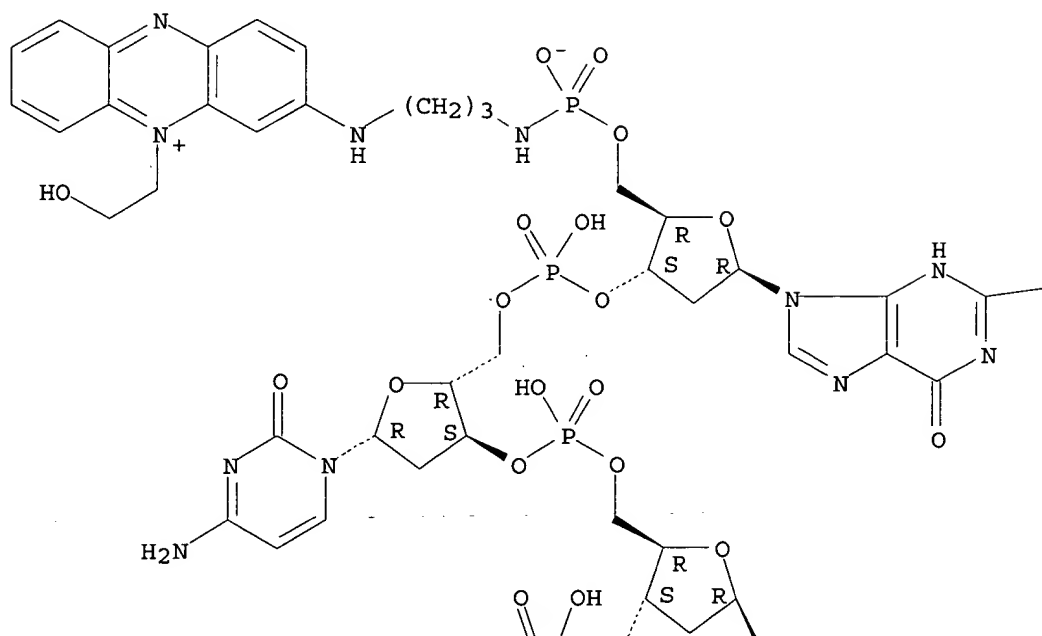
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

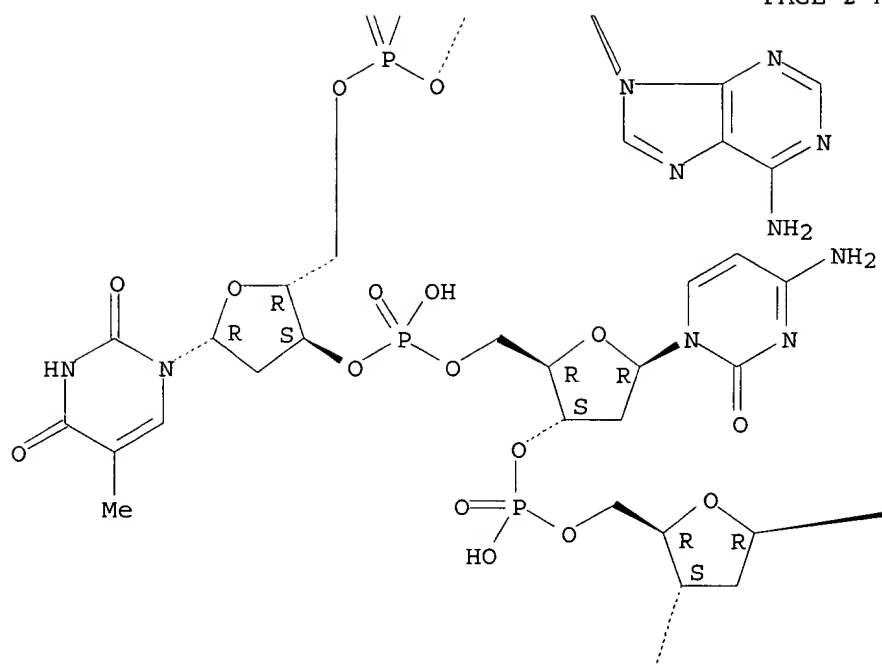
PAGE 1-A



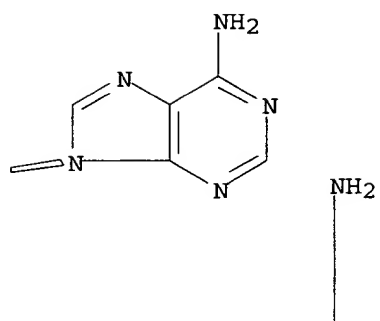
PAGE 1-B

NH₂

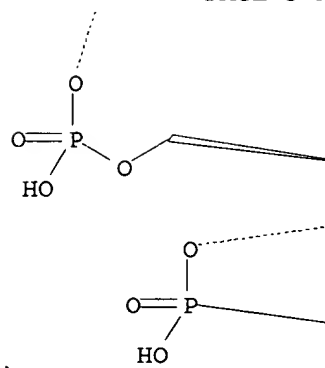
PAGE 2-A



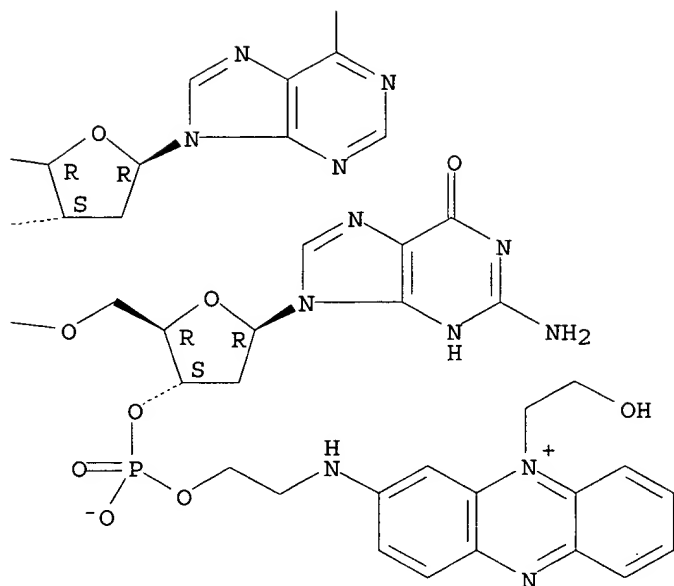
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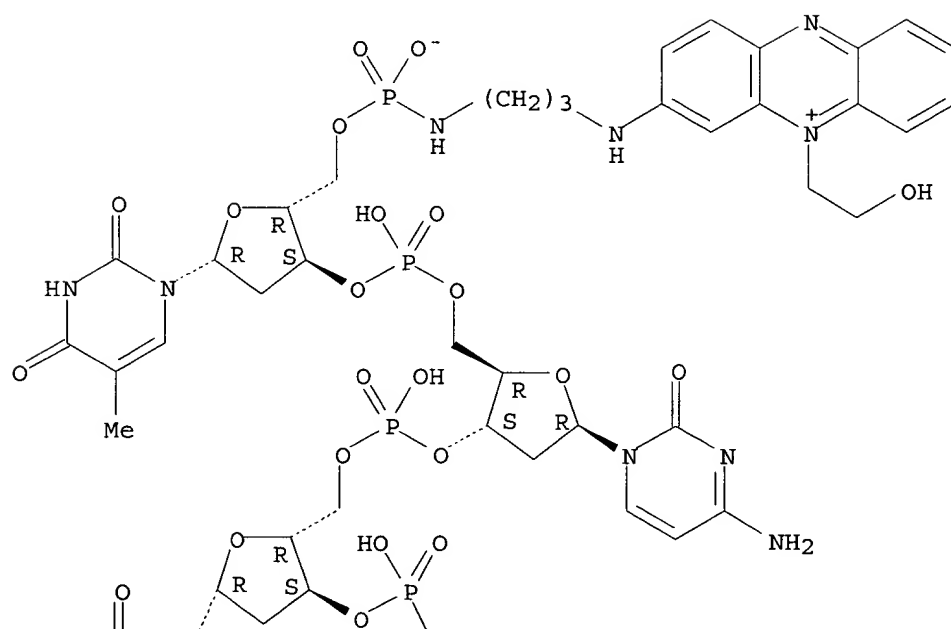
CM 3

CRN 177079-71-9

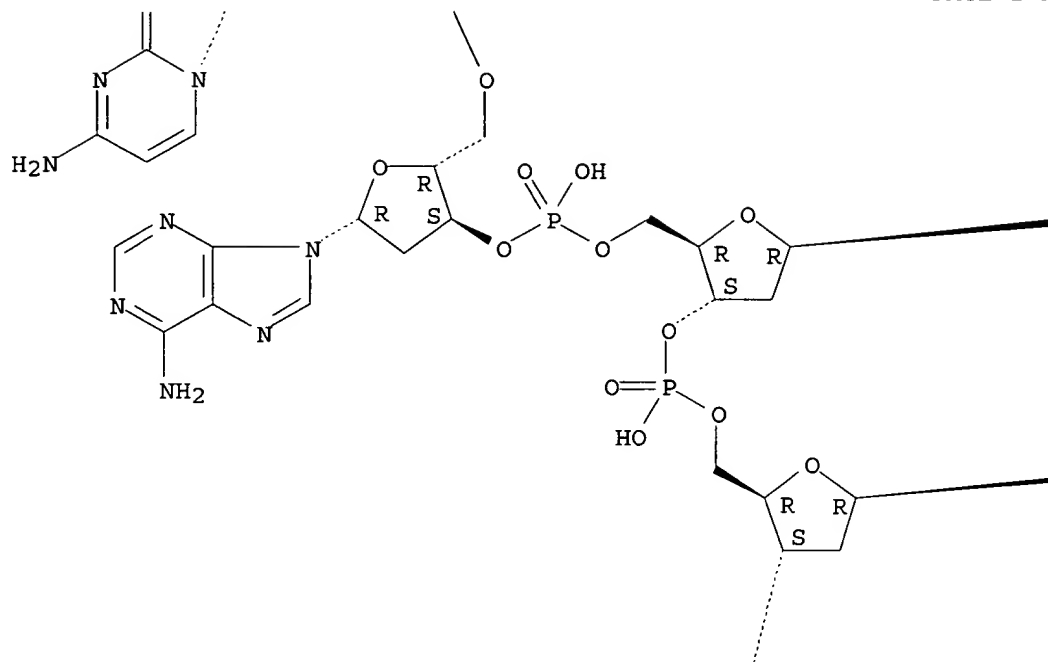
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

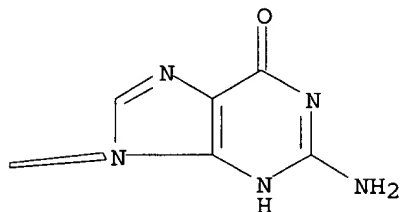
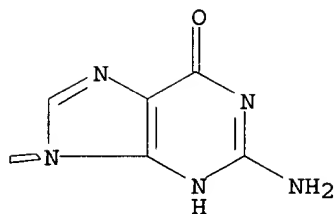
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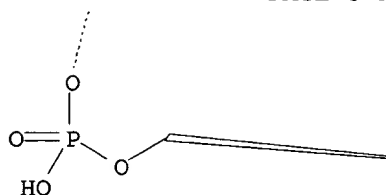
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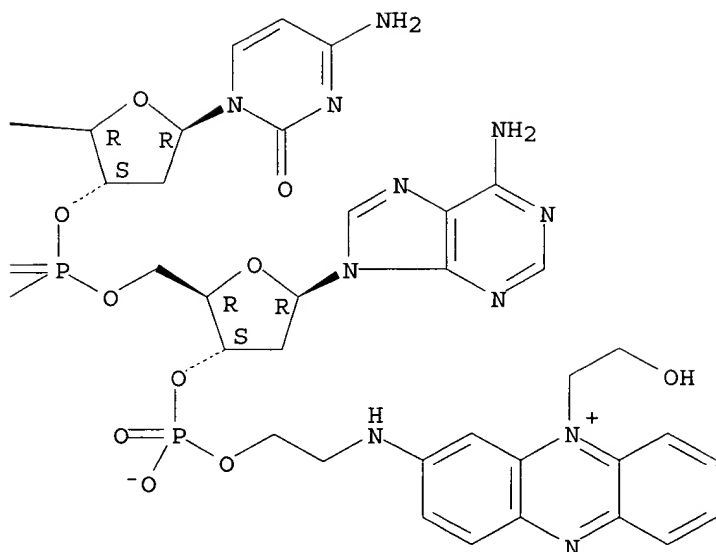
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-84-6 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-

2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]
 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
 adenylyl bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

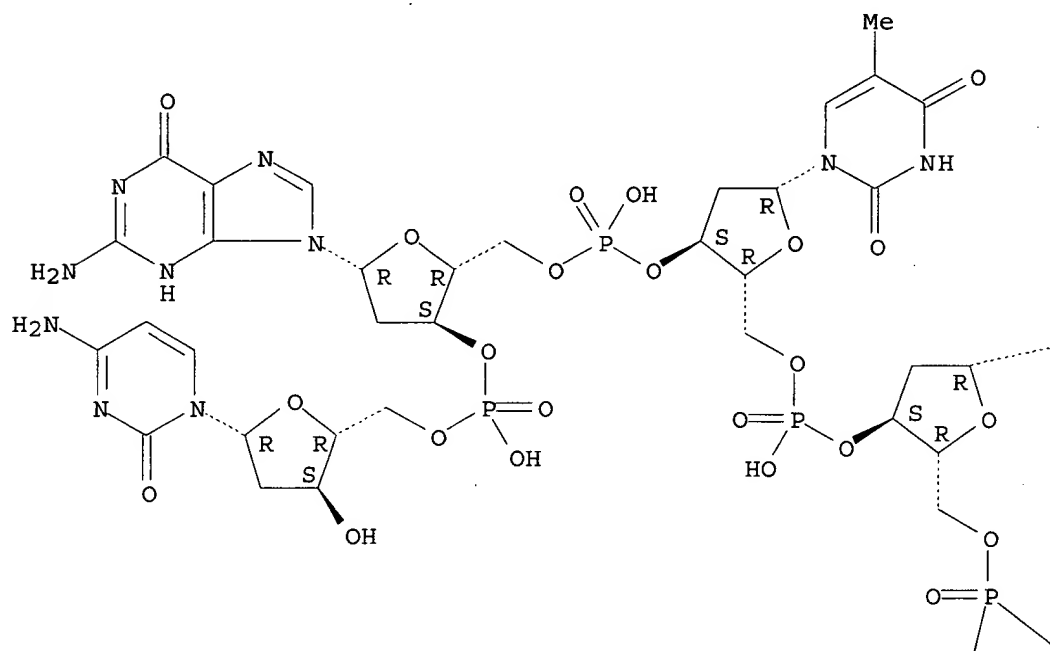
CM 1

CRN 206431-57-4

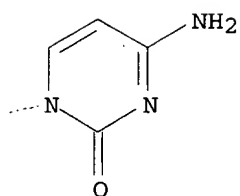
CMF C49 H66 Cl N15 O25 P4

Absolute stereochemistry.

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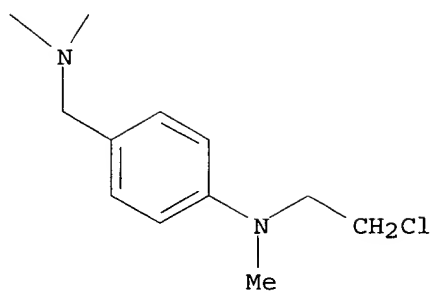


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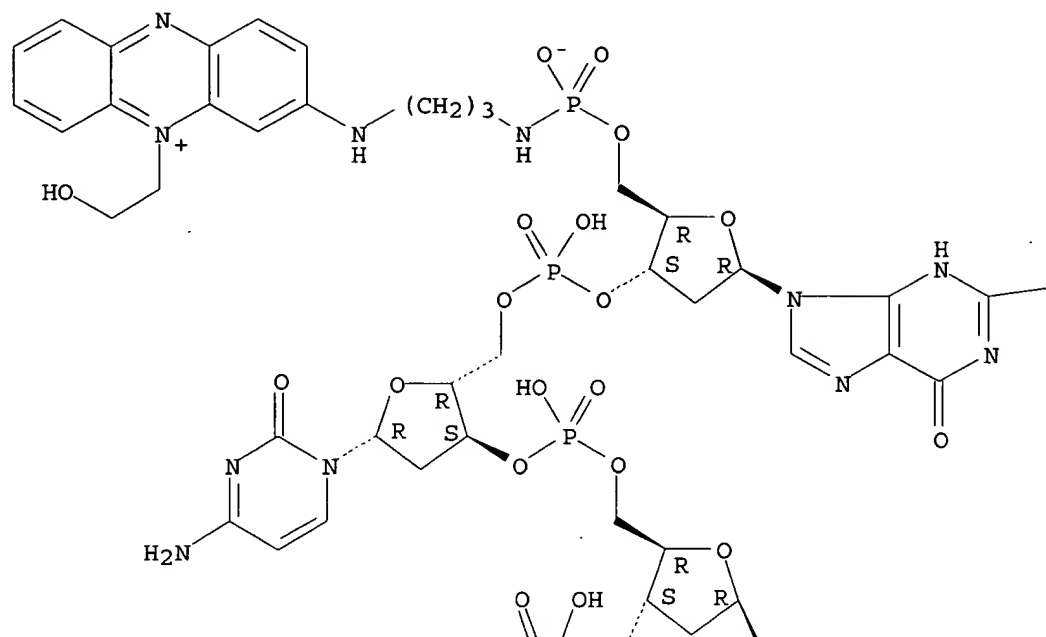
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

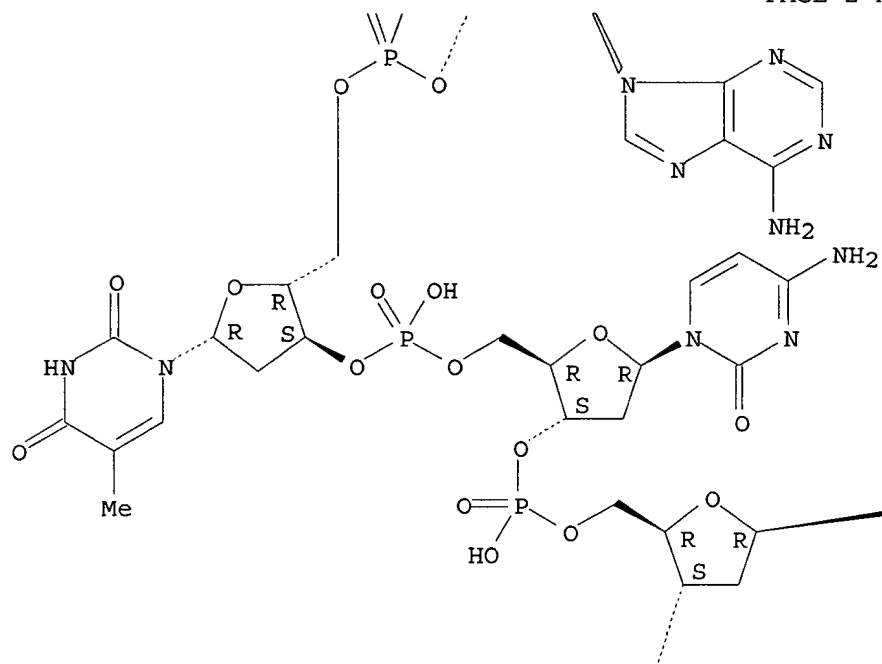
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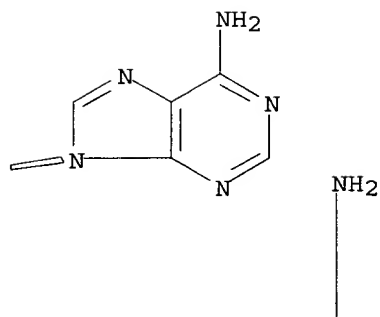
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NH₂

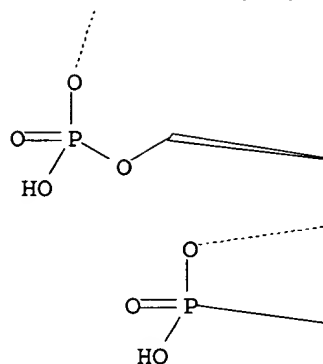
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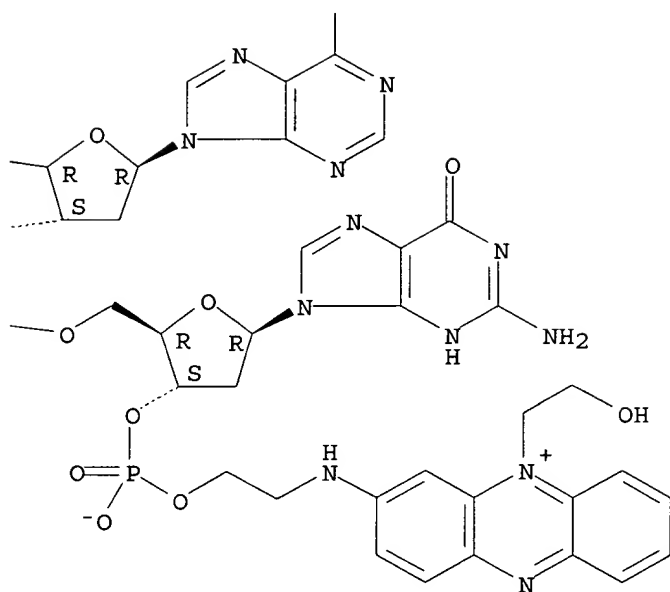
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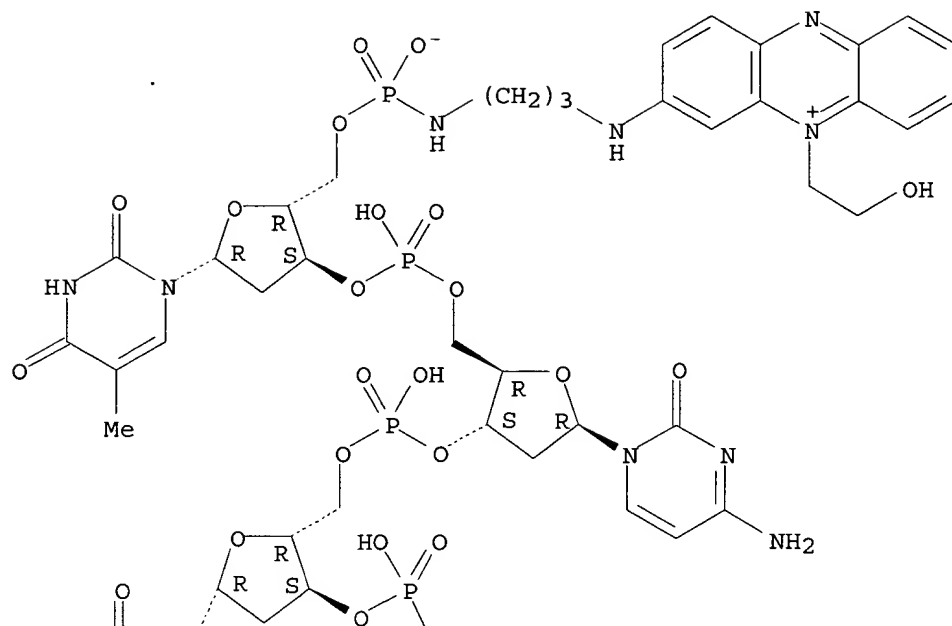
CM 3

CRN 177079-71-9

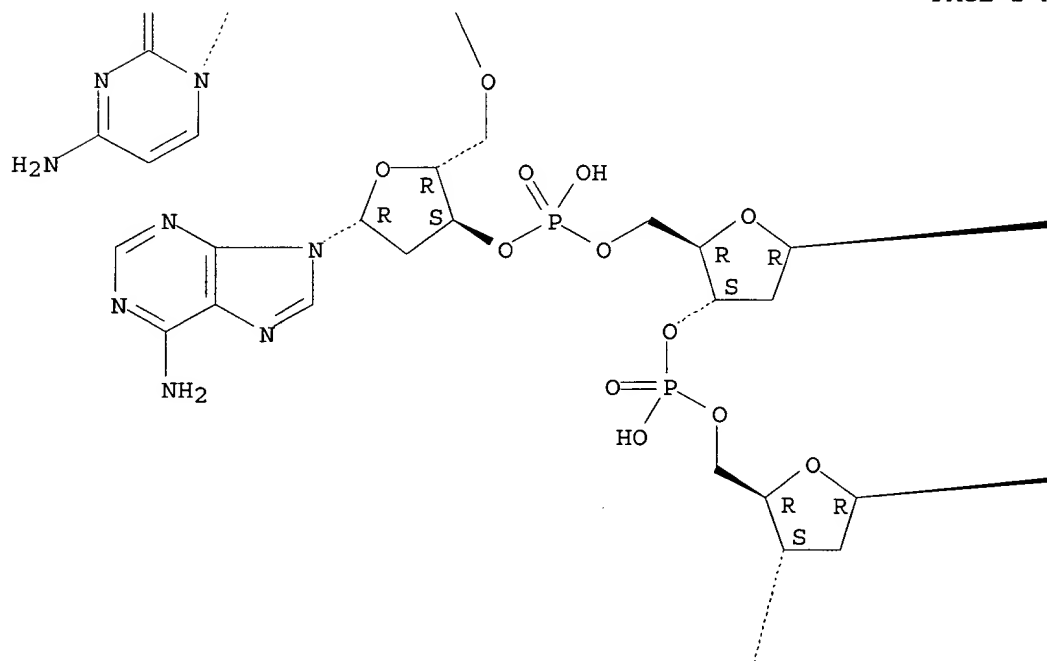
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

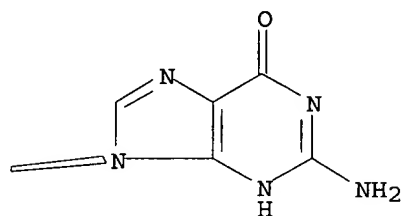
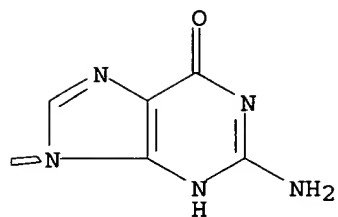
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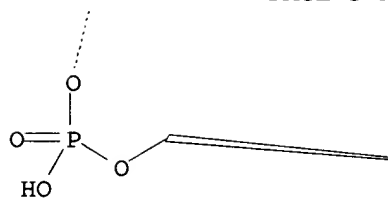
PAGE 2-A



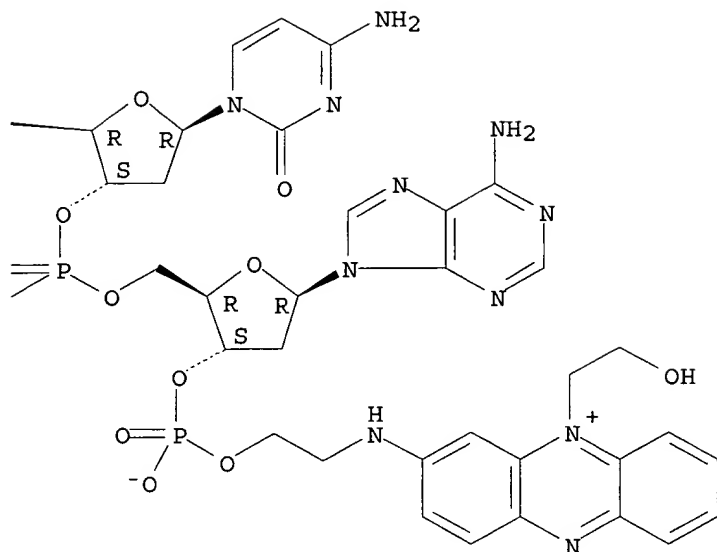
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-86-8 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-adenylyl bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

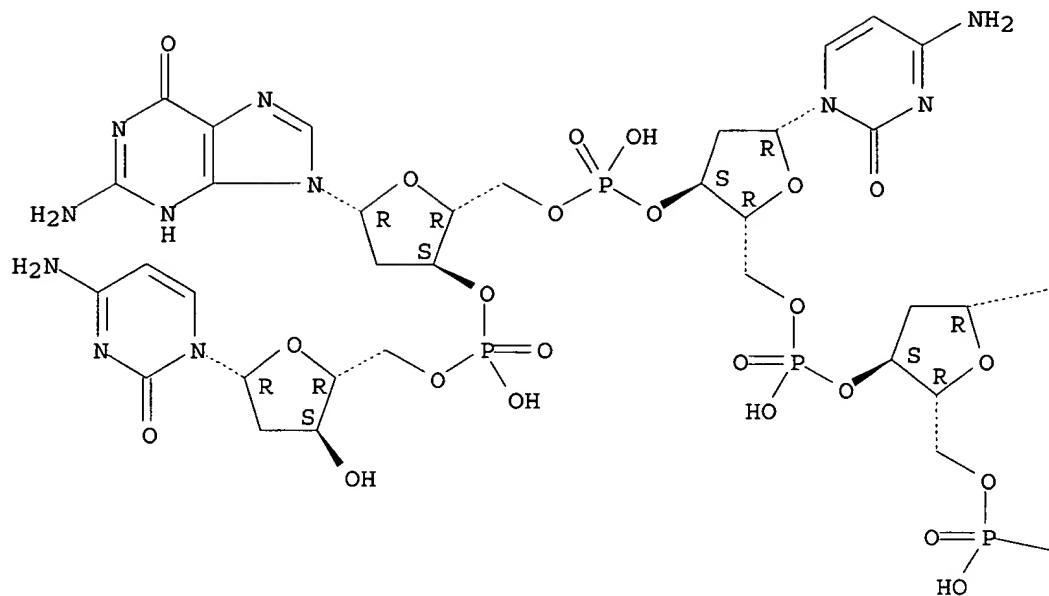
CM 1

CRN 206431-59-6

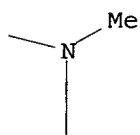
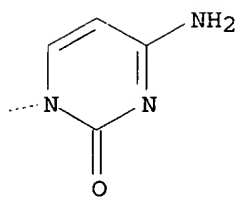
CMF C48 H65 Cl N16 O24 P4

Absolute stereochemistry.

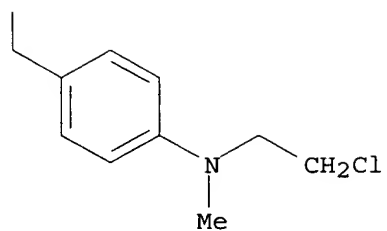
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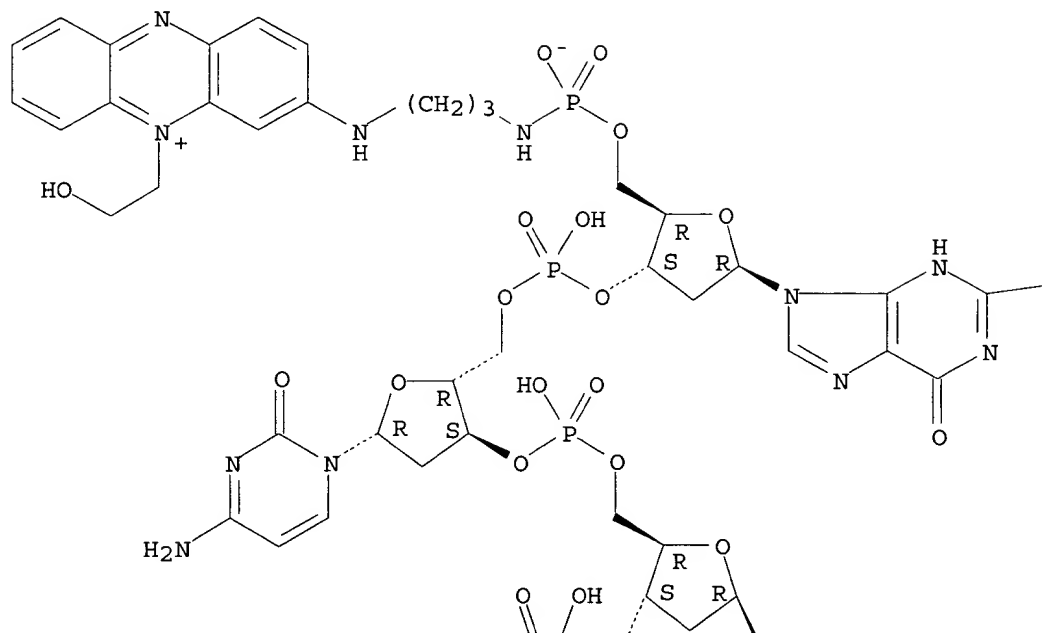
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

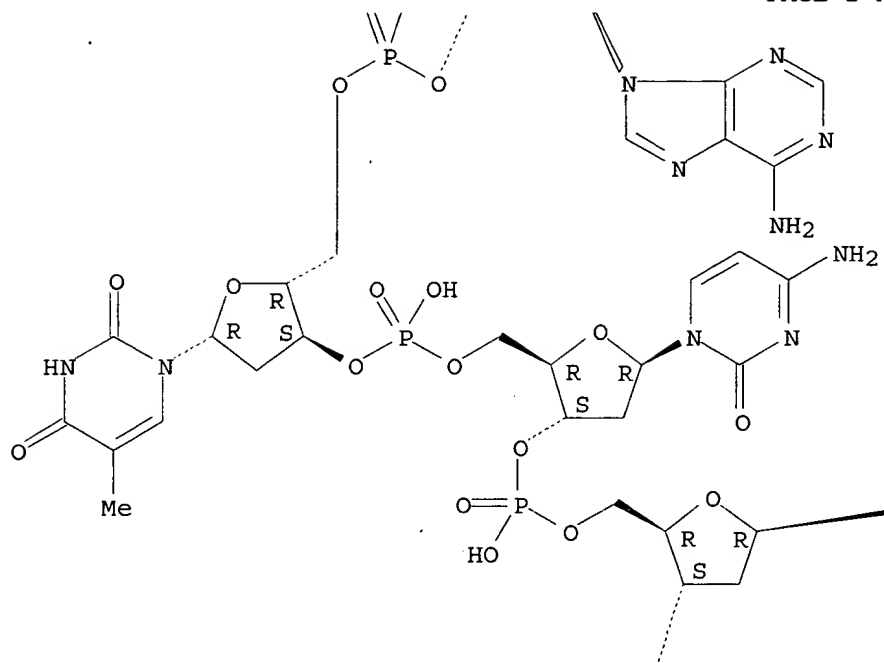
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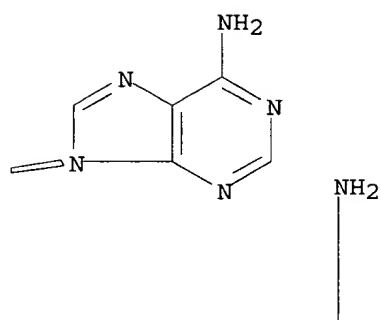
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NH₂

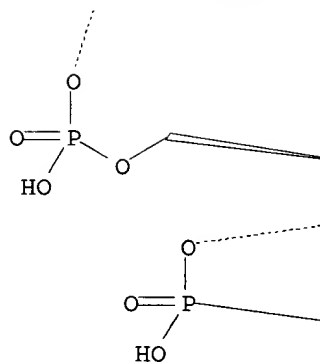
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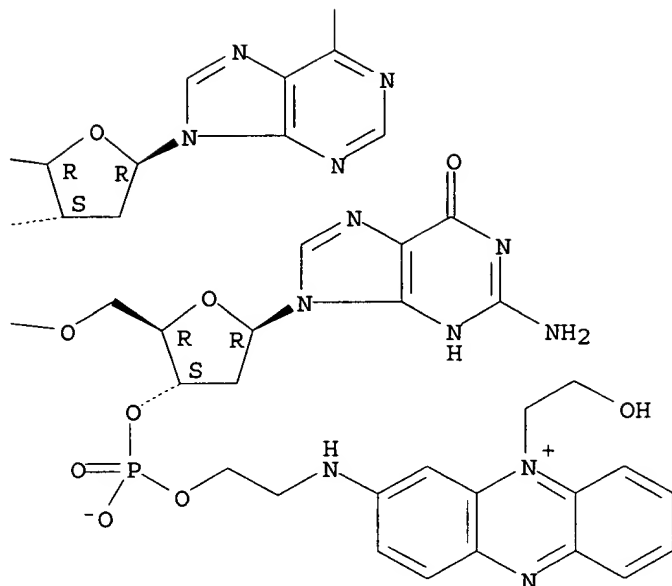
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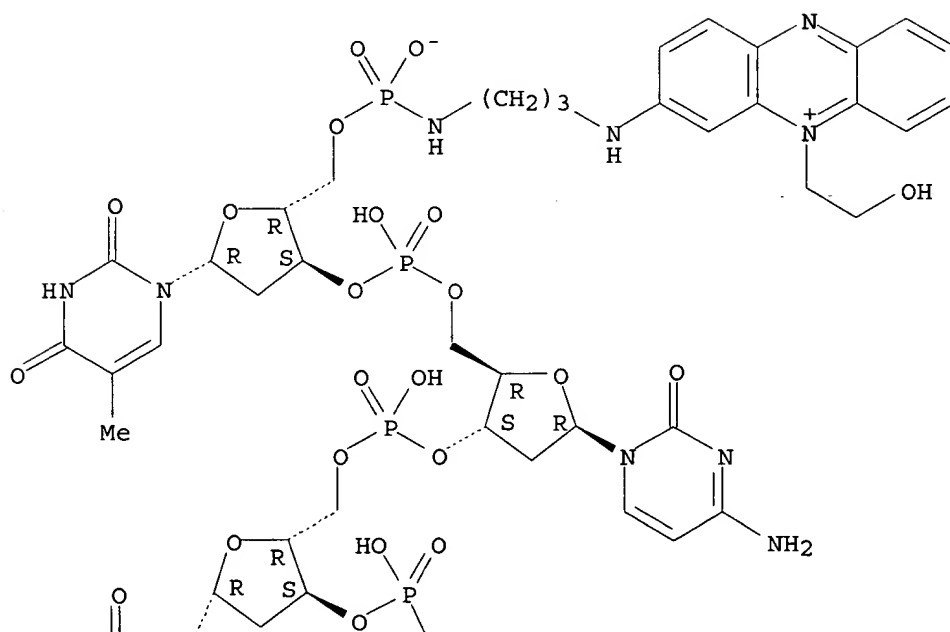
CM 3

CRN 177079-71-9

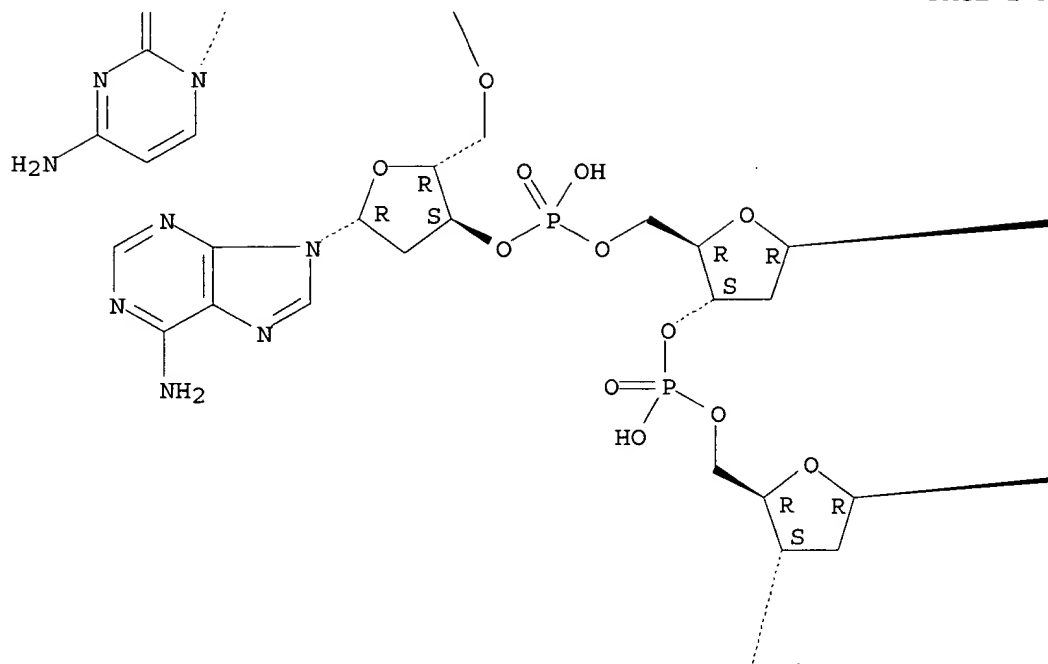
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

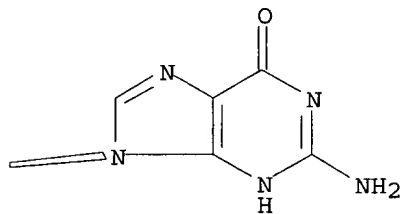
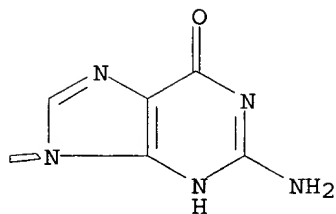
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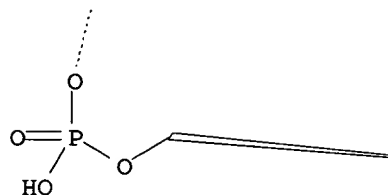
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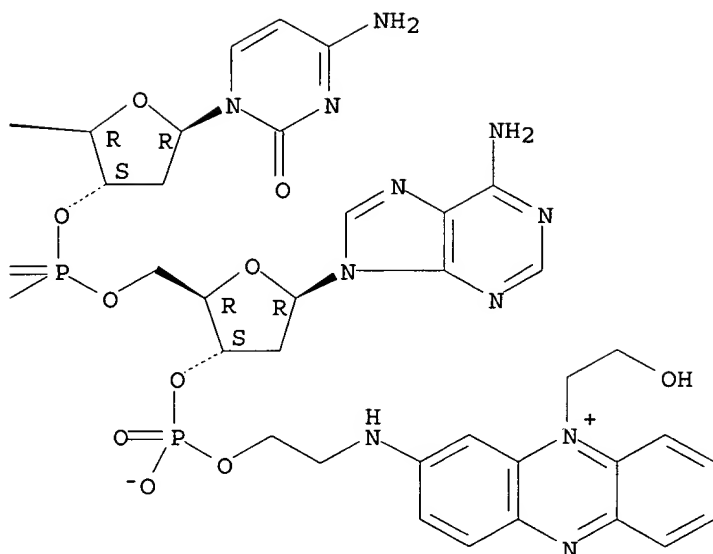
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-87-9 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-

2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]
 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
 adenylylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

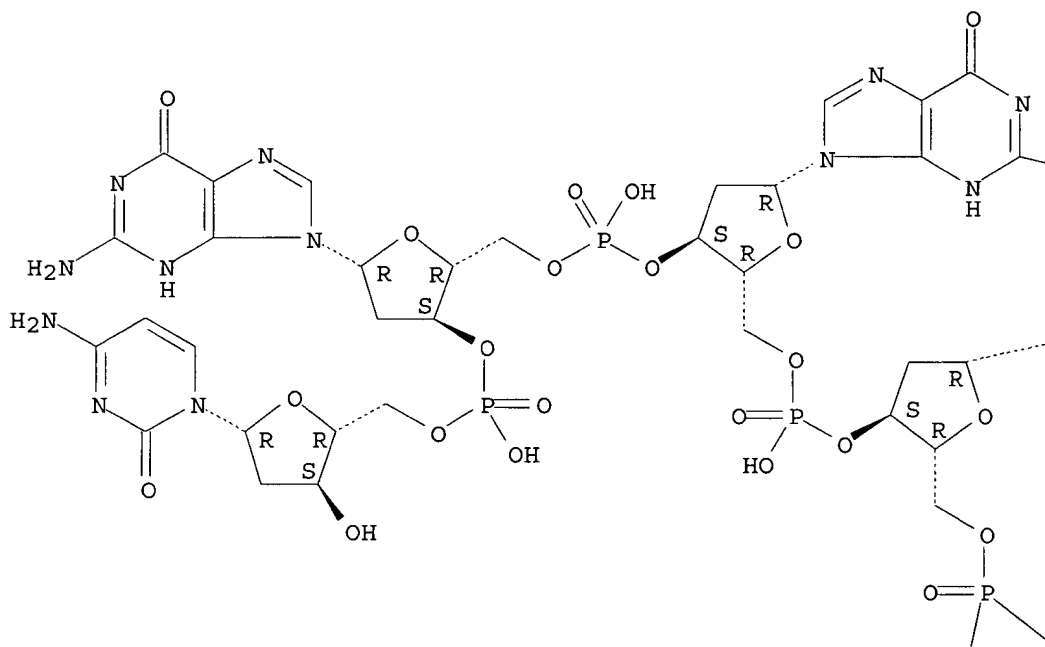
CM 1

CRN 206431-61-0

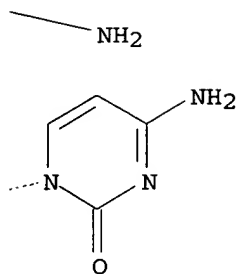
CMF C49 H65 Cl N18 O24 P4

Absolute stereochemistry.

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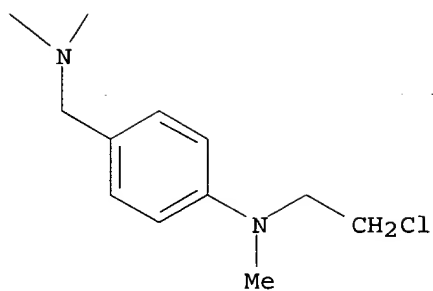


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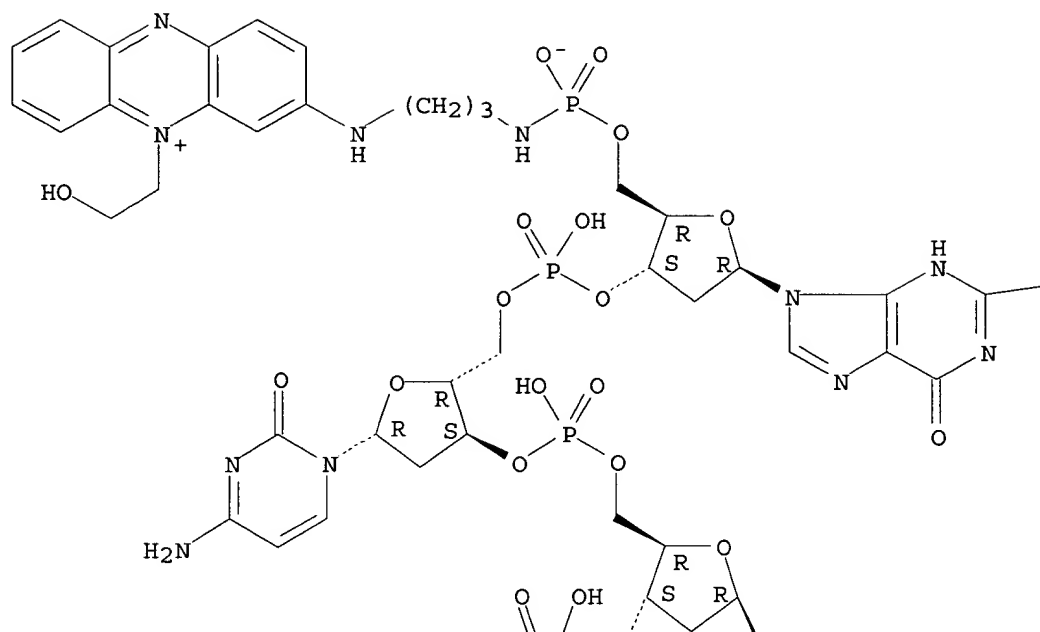
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

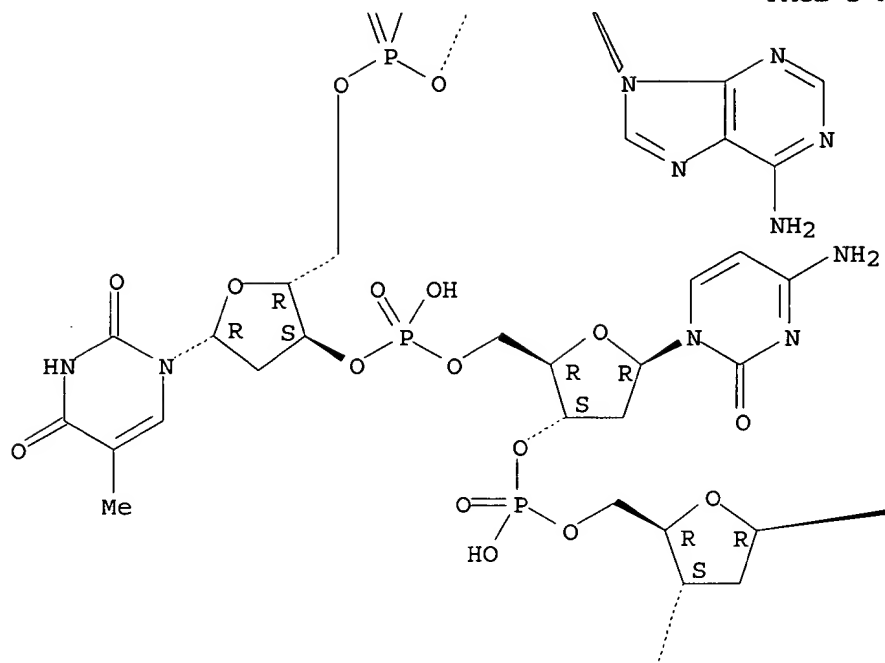
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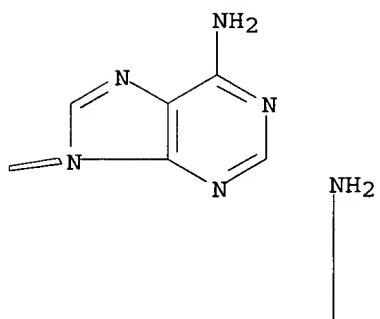
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NH₂

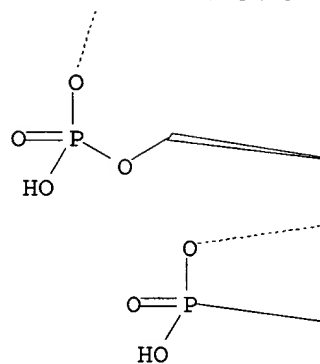
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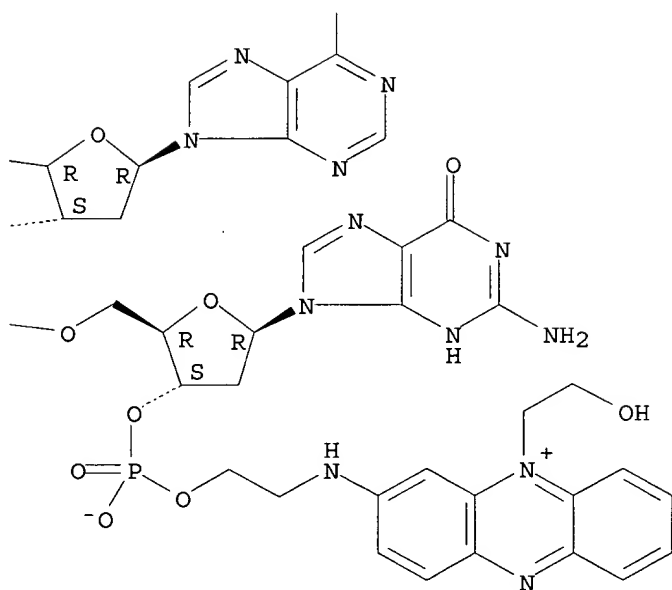
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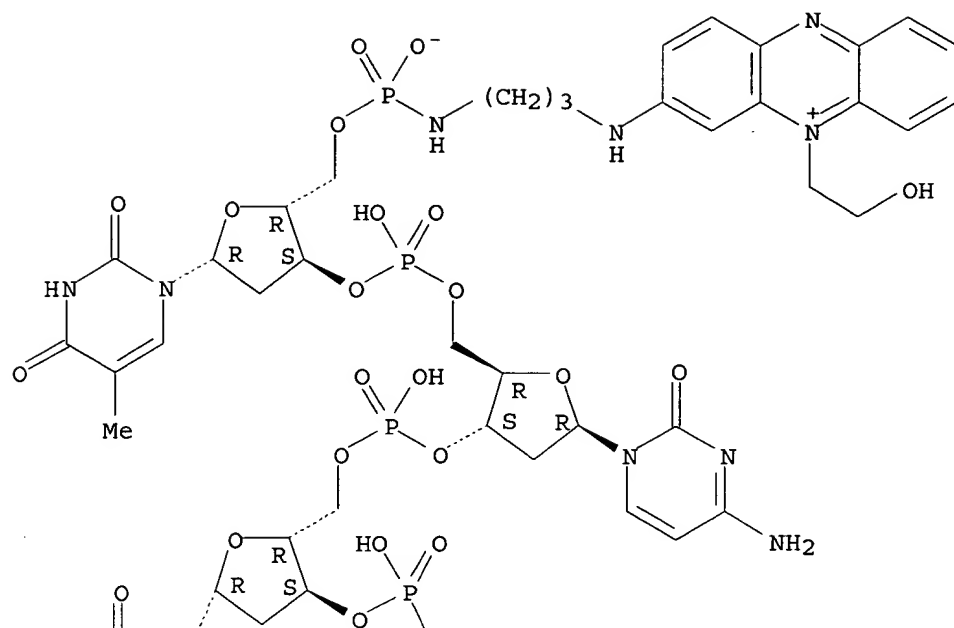
CM 3

CRN 177079-71-9

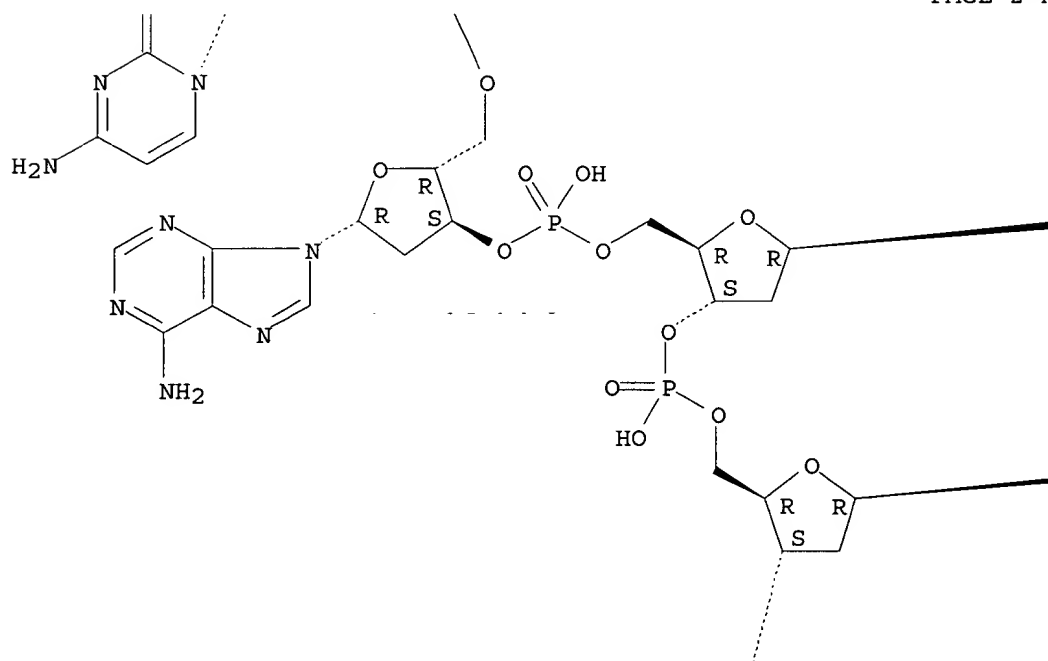
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

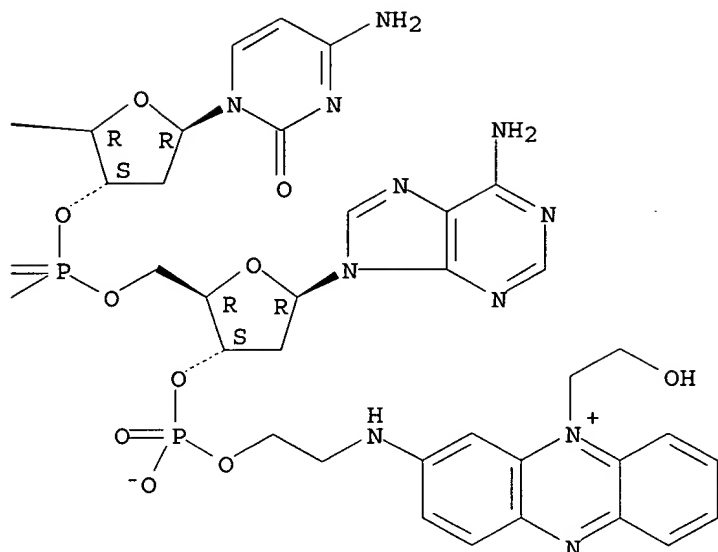
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-88-0 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

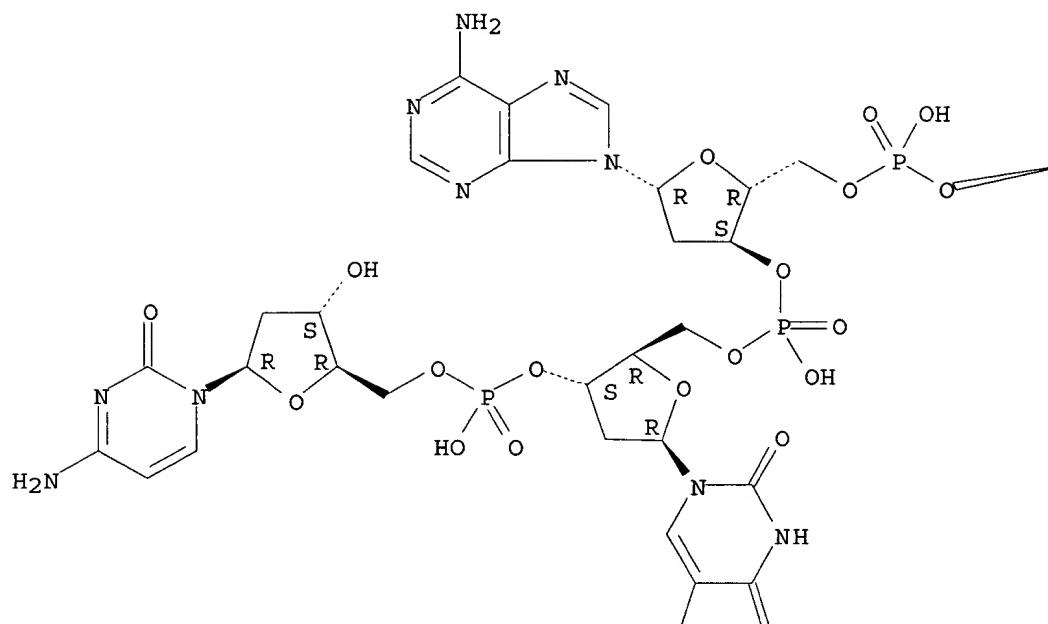
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CRN 206431-63-2

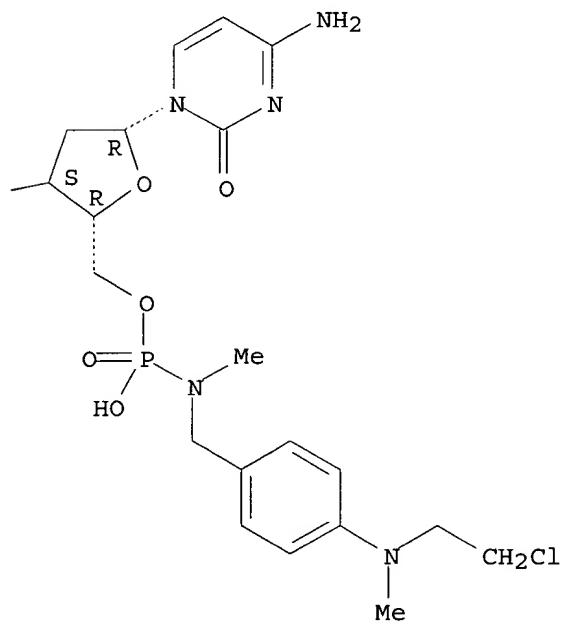
CMF C49 H66 Cl N15 O24 P4

Absolute stereochemistry.

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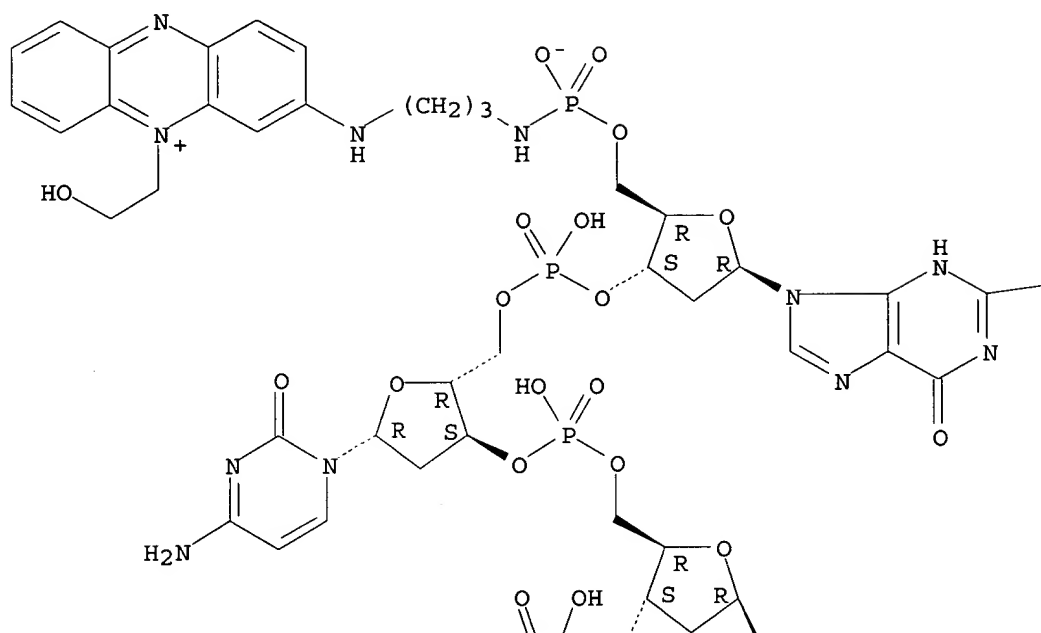
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

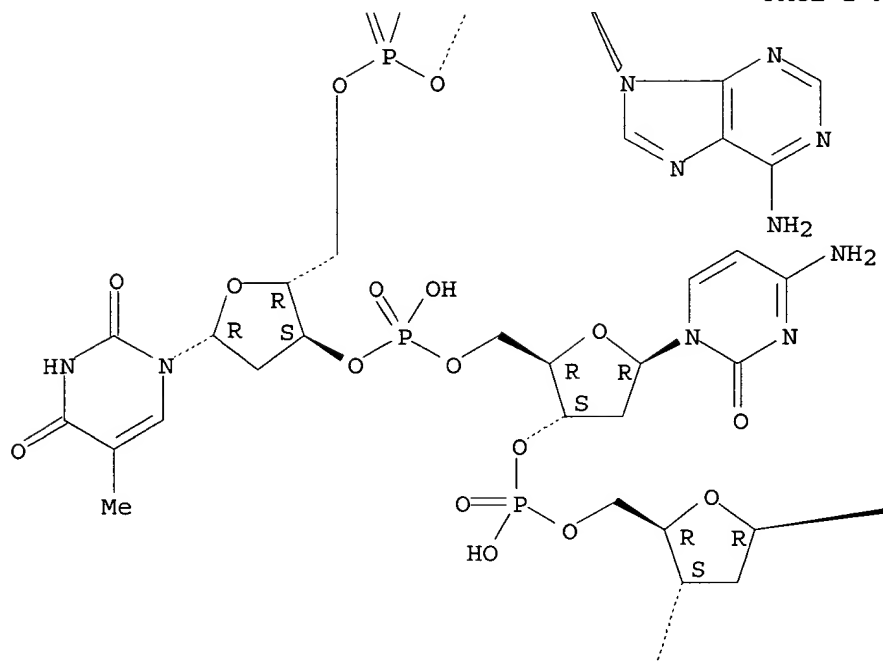
PAGE 1-A



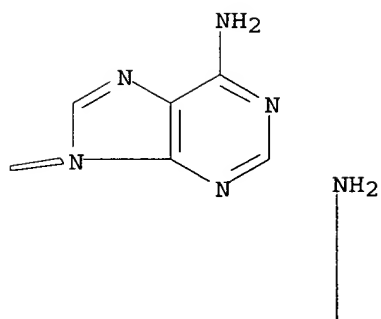
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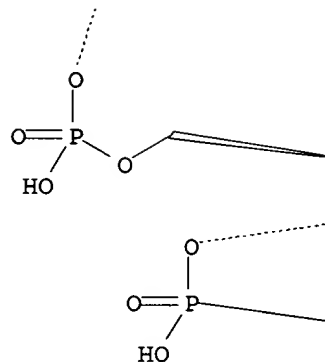
PAGE 2-A



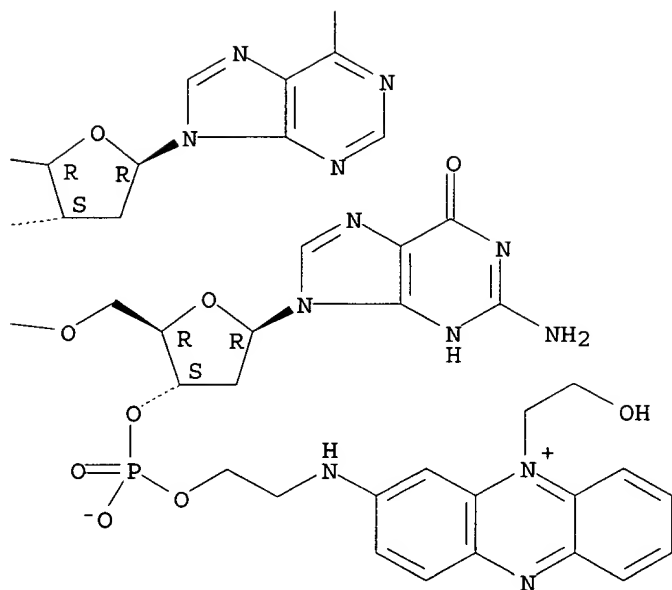
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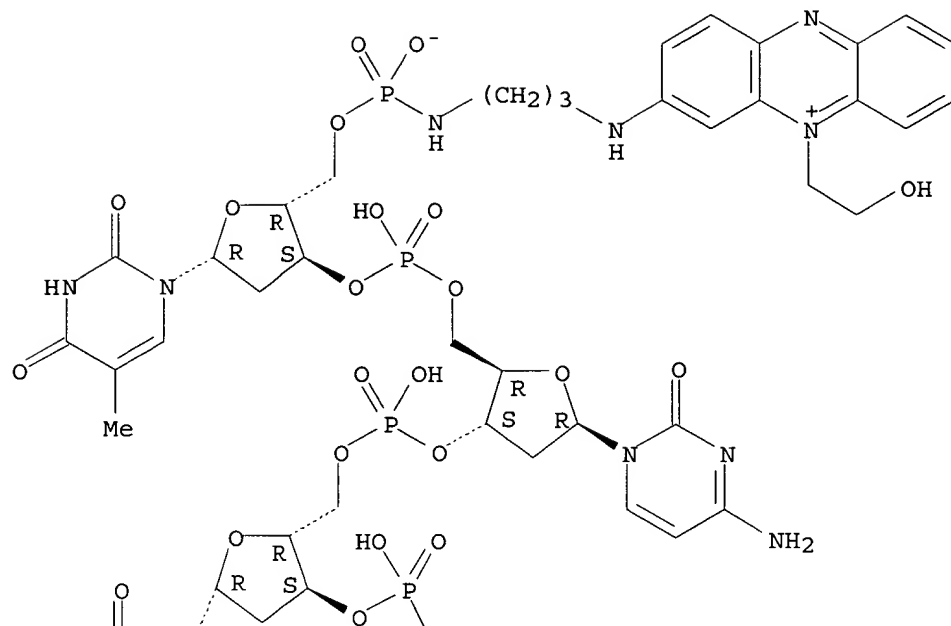
CM 3

CRN 177079-71-9

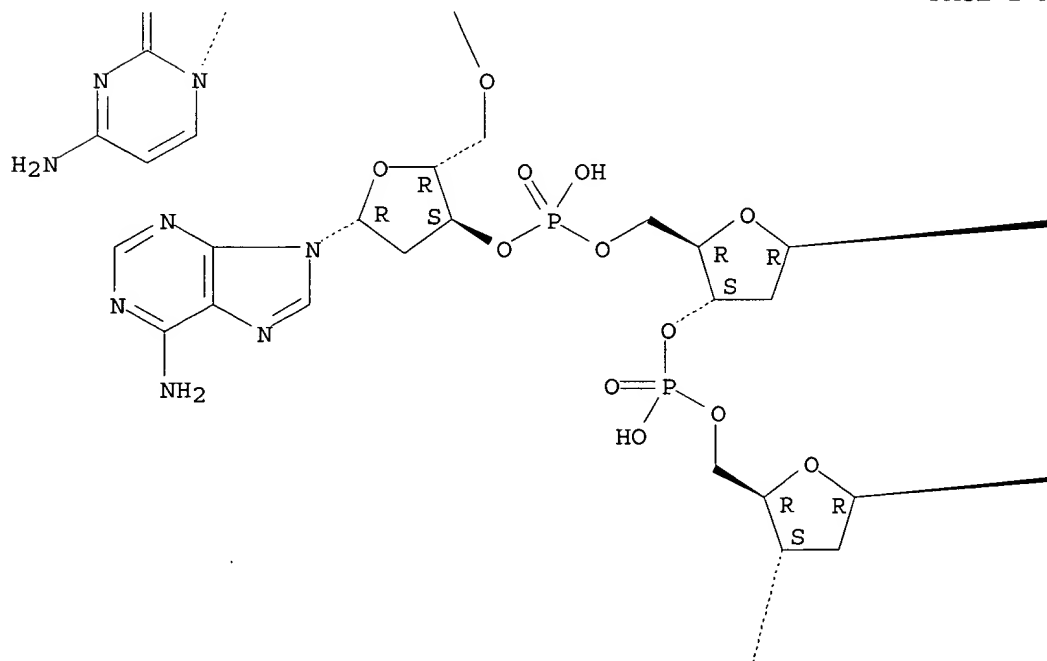
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

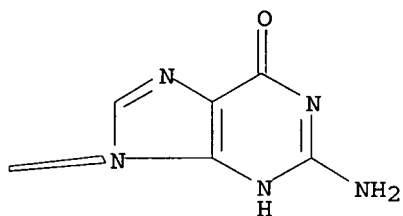
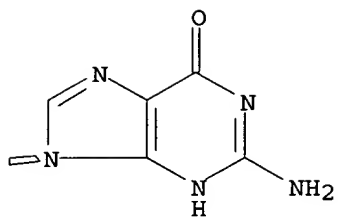
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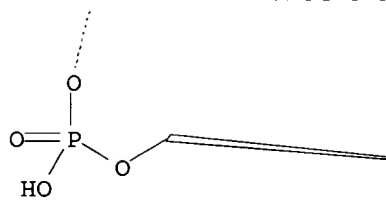
PAGE 2-A



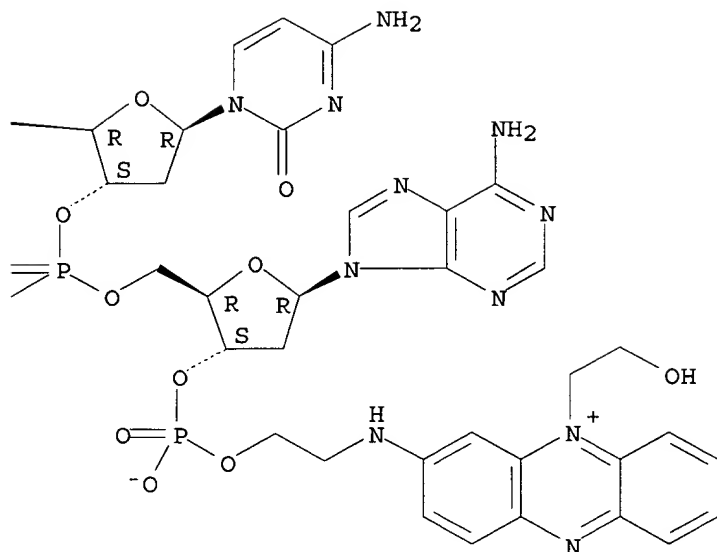
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-89-1 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylyl bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

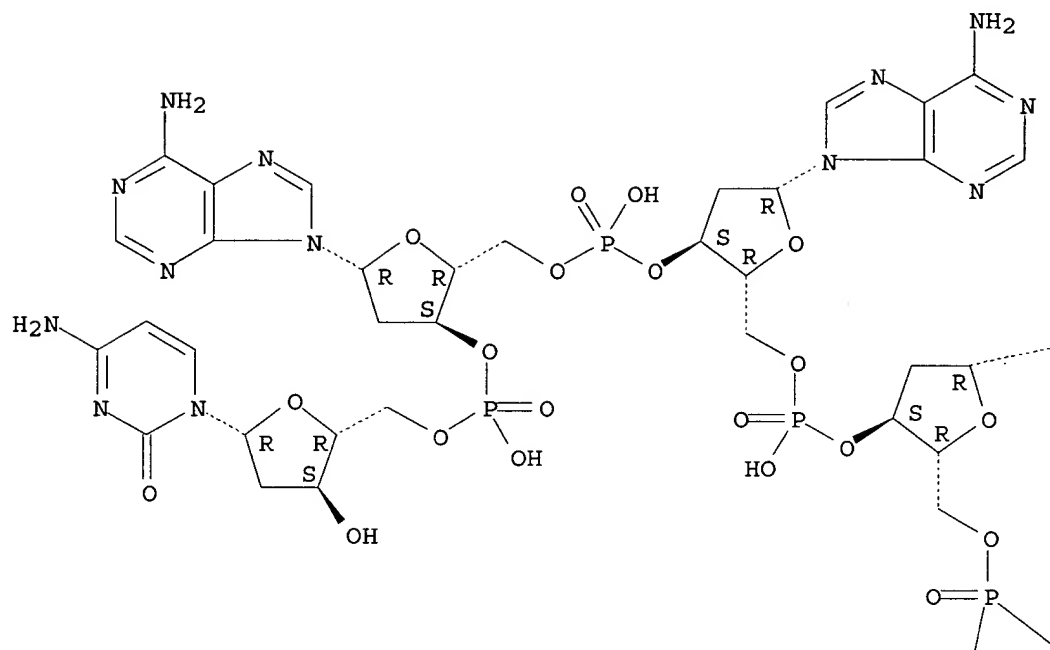
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CRN 206431-65-4

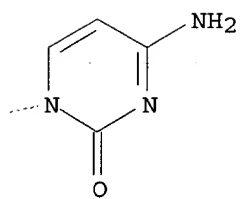
CMF C49 H65 Cl N18 O22 P4

Absolute stereochemistry.

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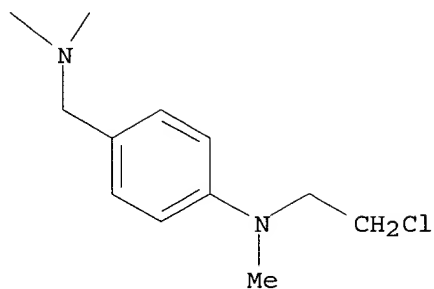


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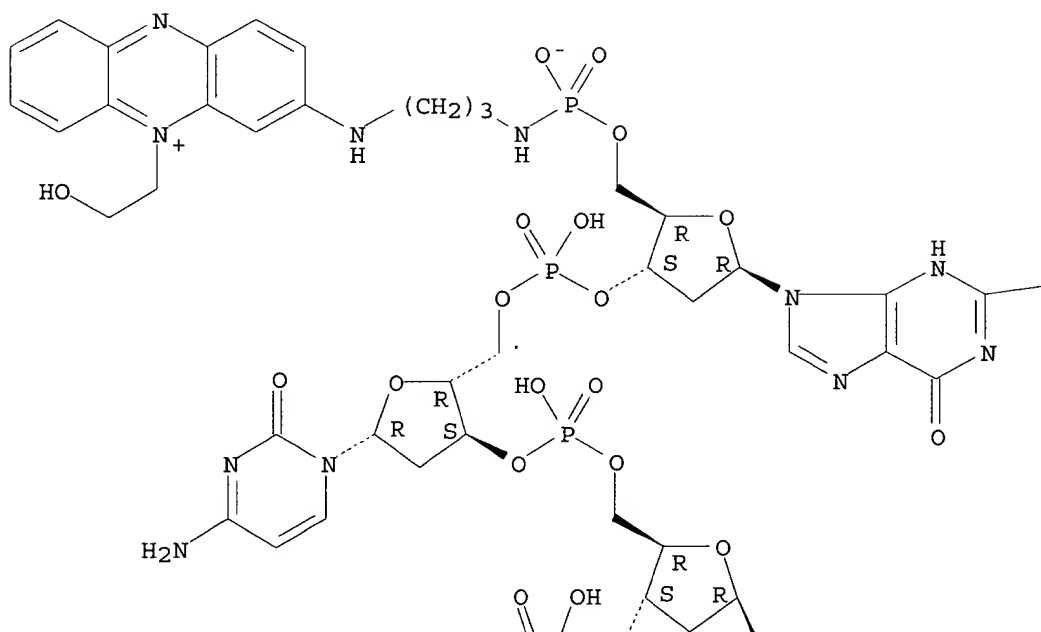
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

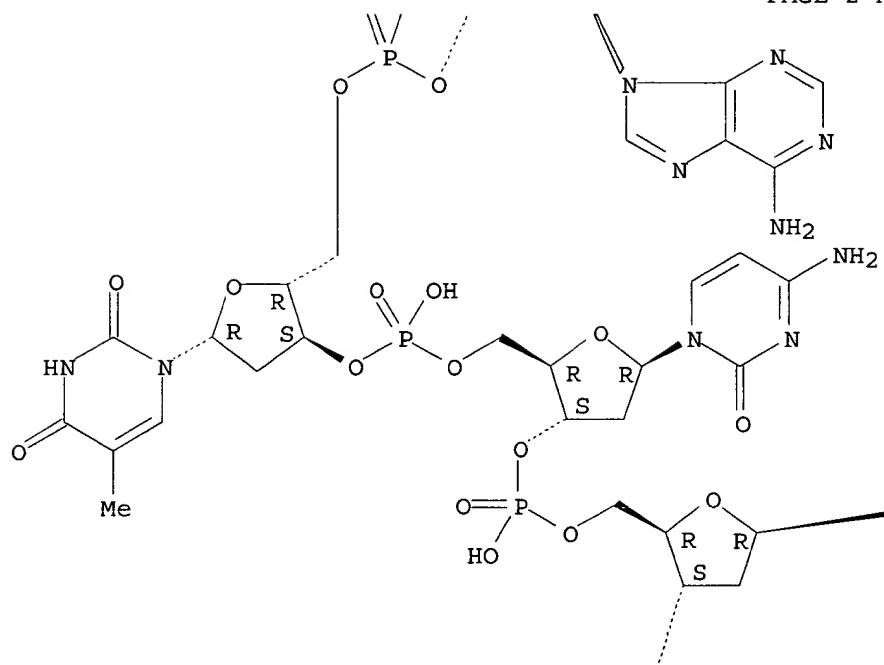
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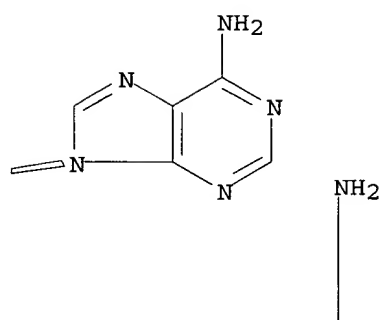
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NH₂

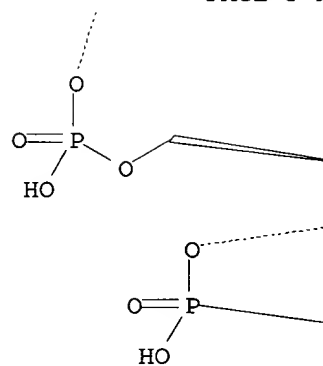
PAGE 2-A



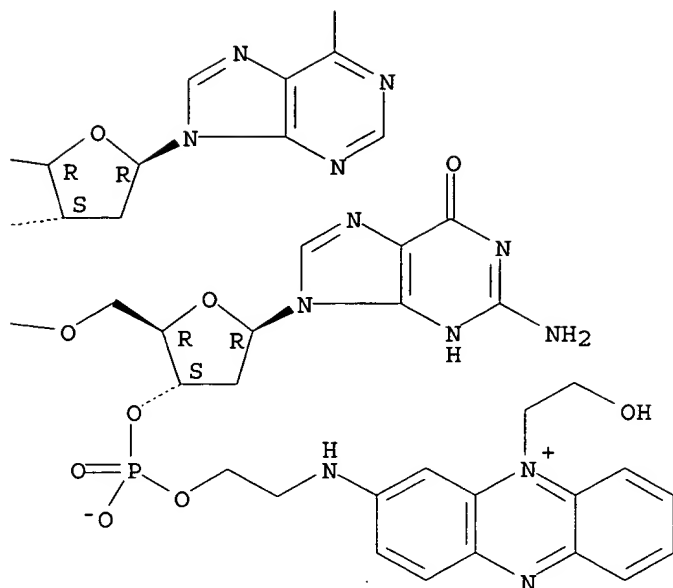
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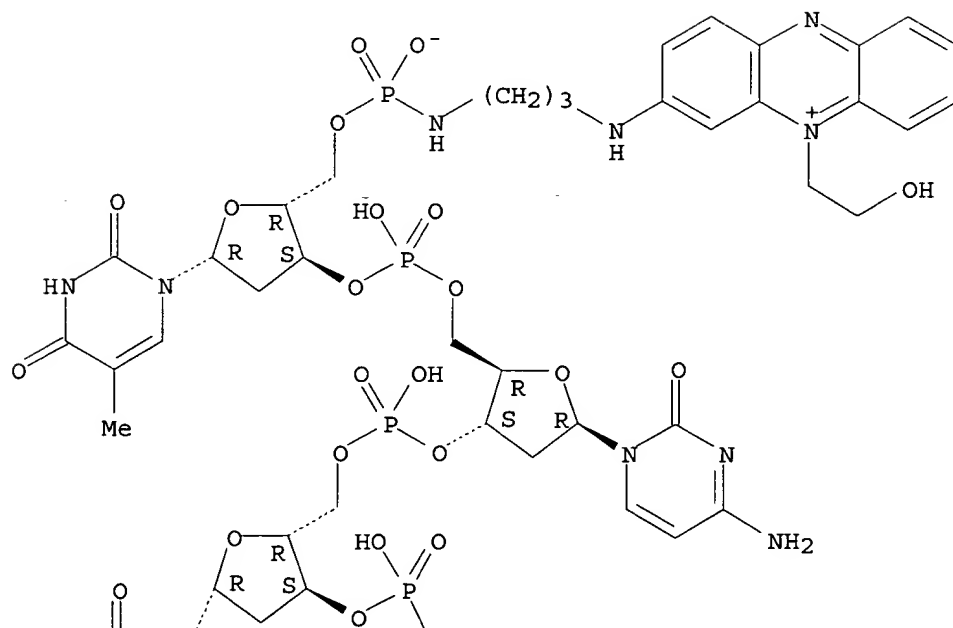
CM 3

CRN 177079-71-9

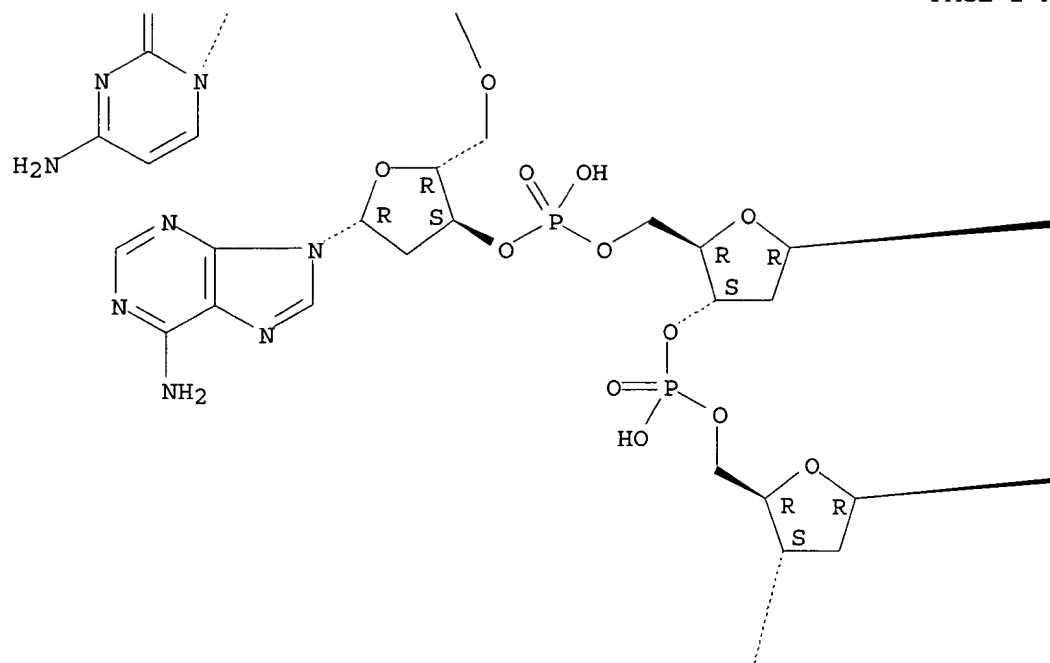
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

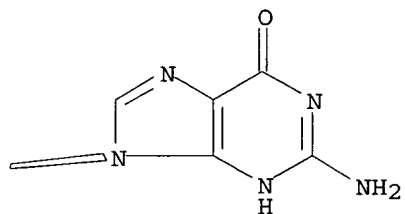
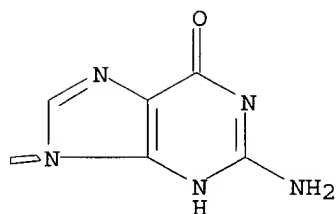
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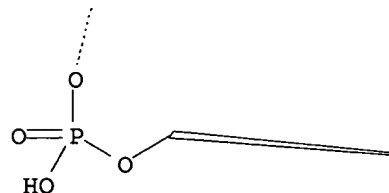
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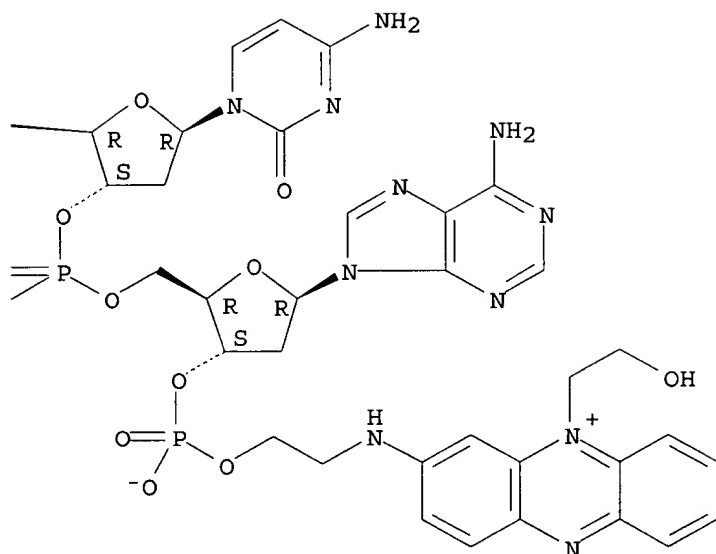
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CM 4

CRN 150227-65-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206977-95-9 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-

2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]
 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
 adenylylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

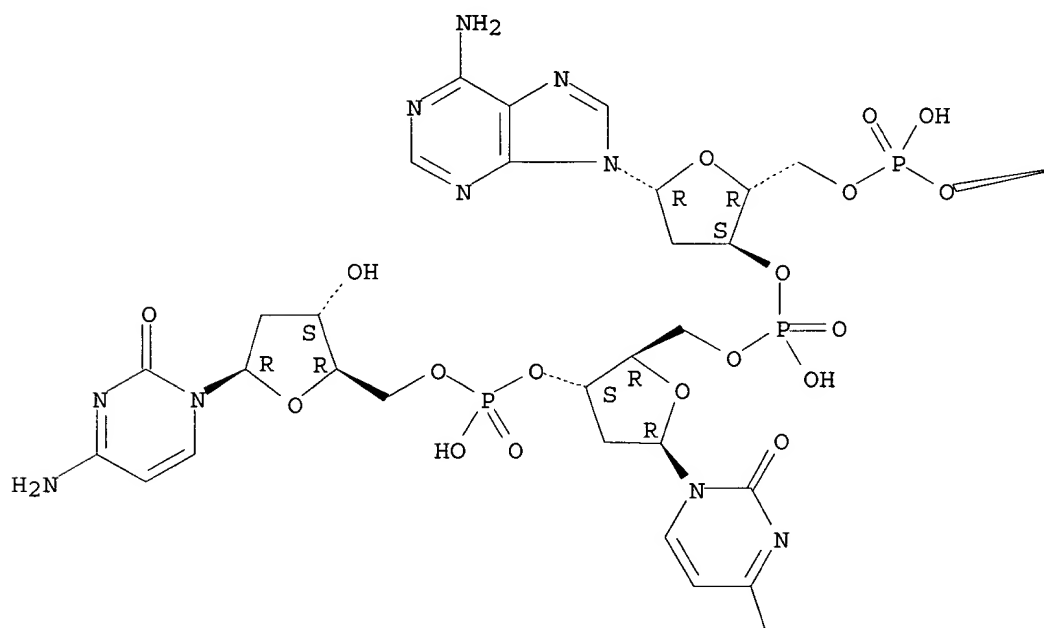
CM 1

CRN 206431-67-6

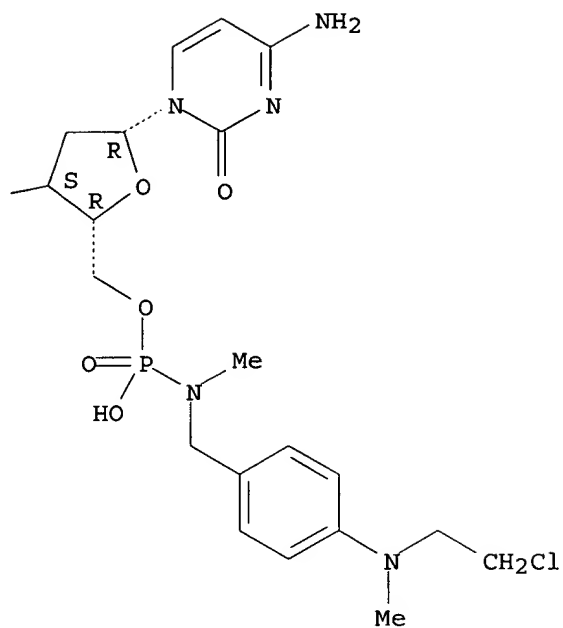
CMF C48 H65 Cl N16 O23 P4

Absolute stereochemistry.

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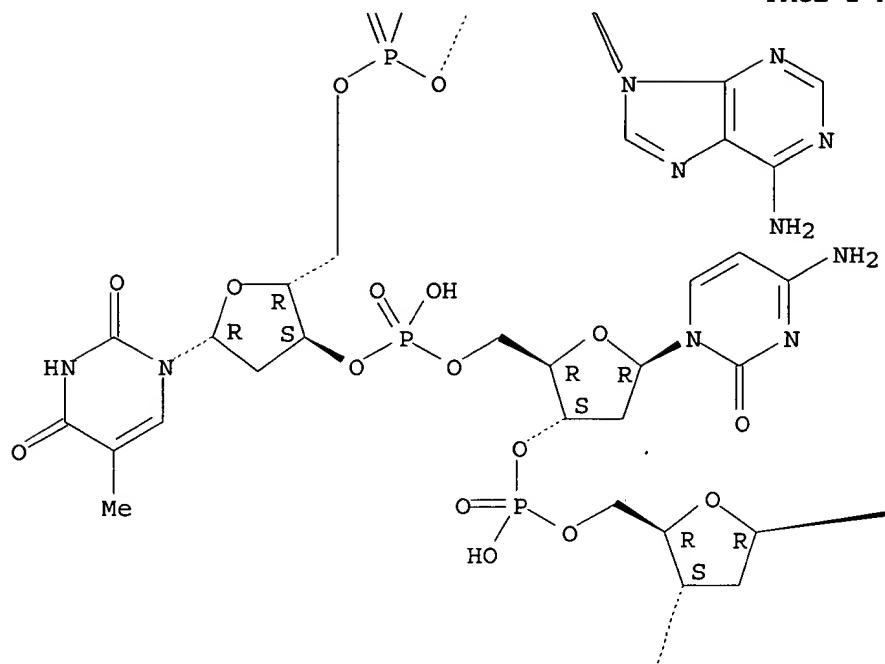
CM 2

CRN 177079-72-0

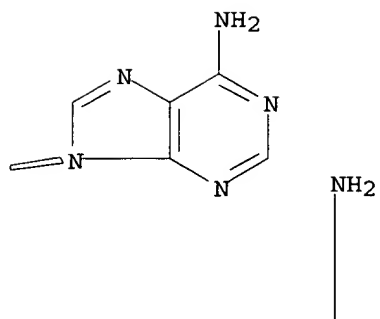
CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

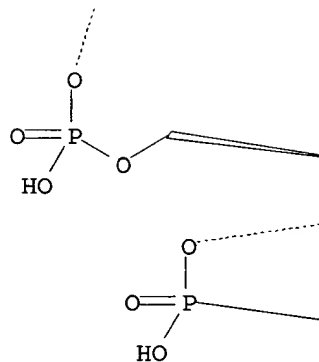
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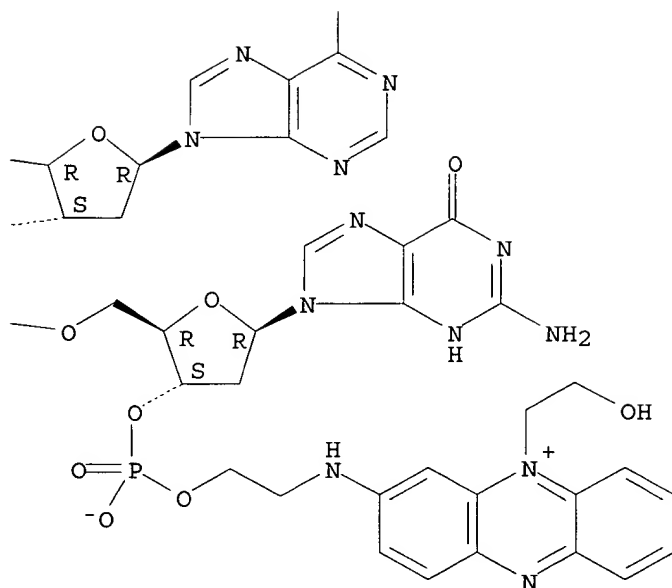
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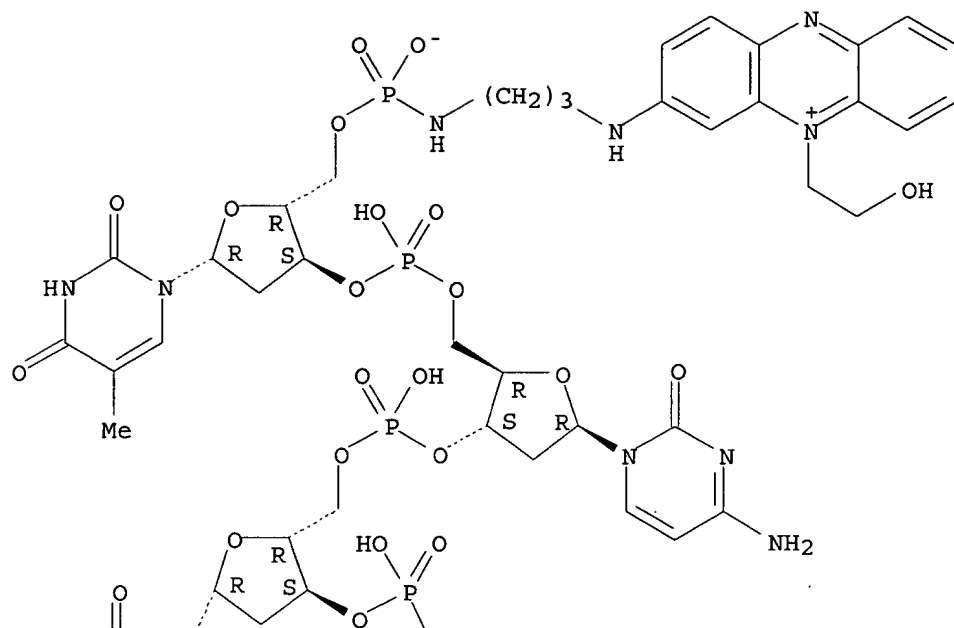
CM 3

CRN 177079-71-9

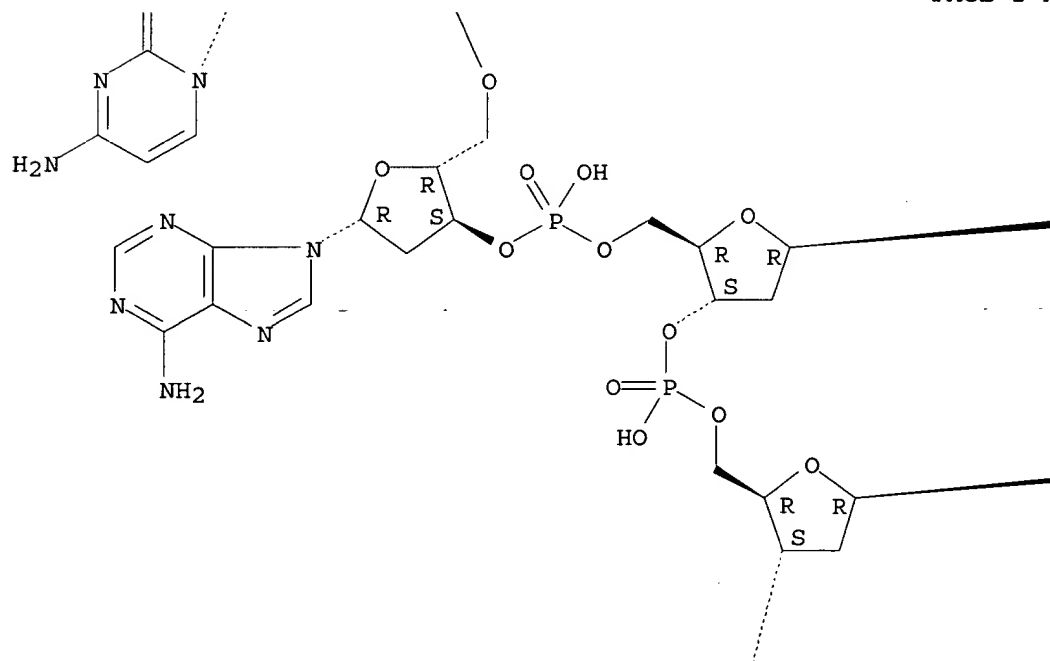
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

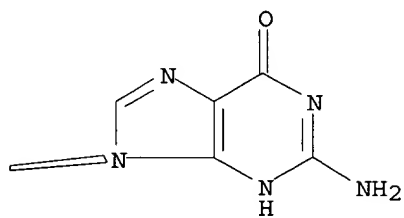
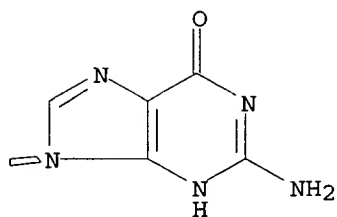
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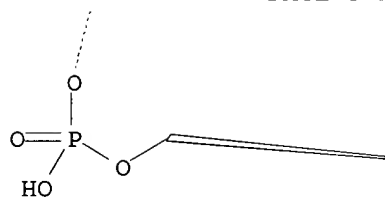
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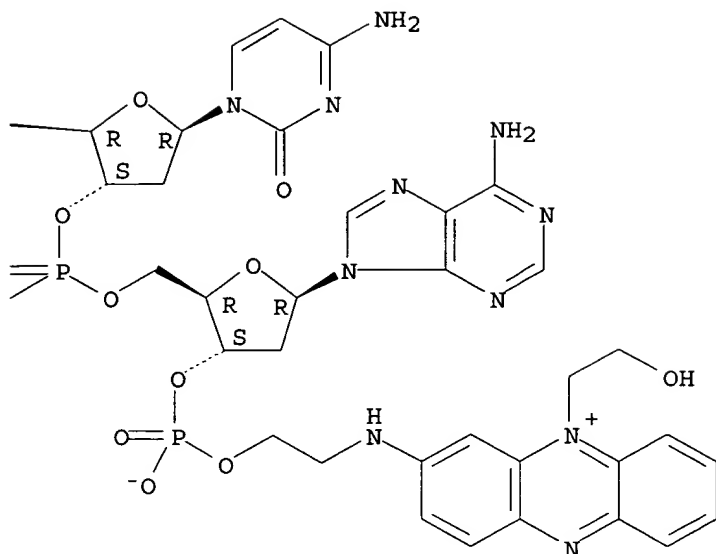
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-00-9 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

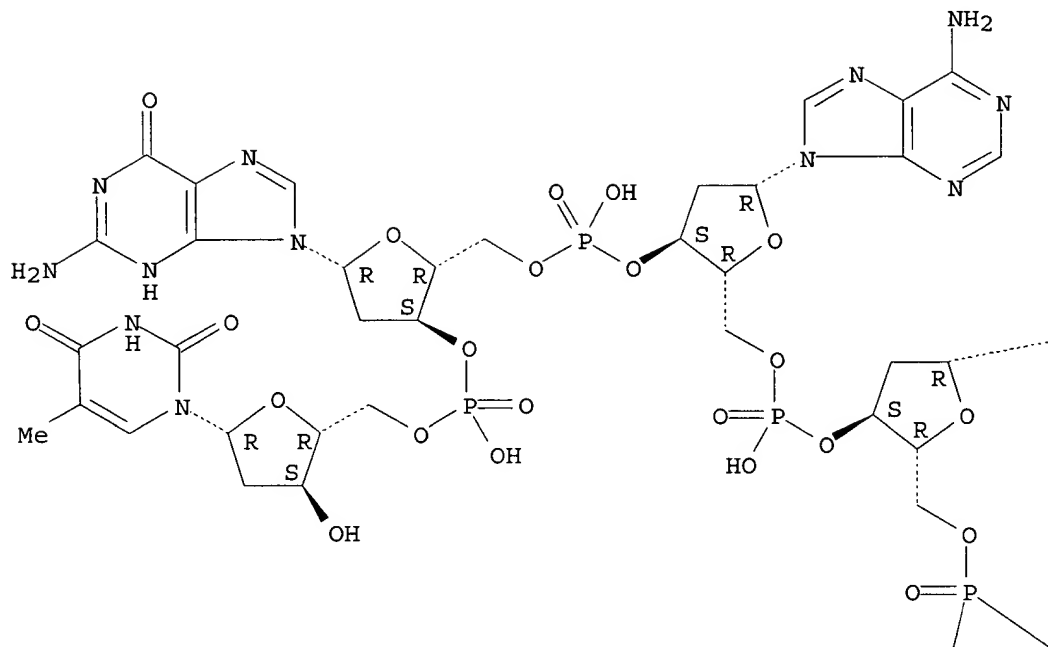
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CRN 206431-69-8

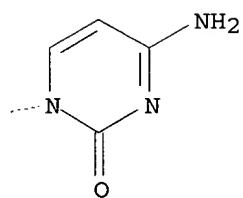
CMF C50 H66 Cl N17 O24 P4

Absolute stereochemistry.

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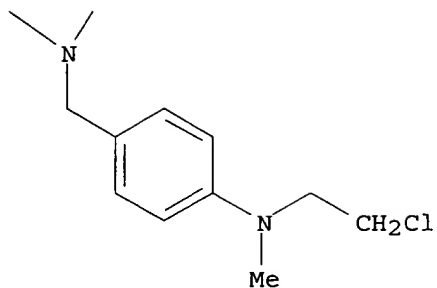
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HO

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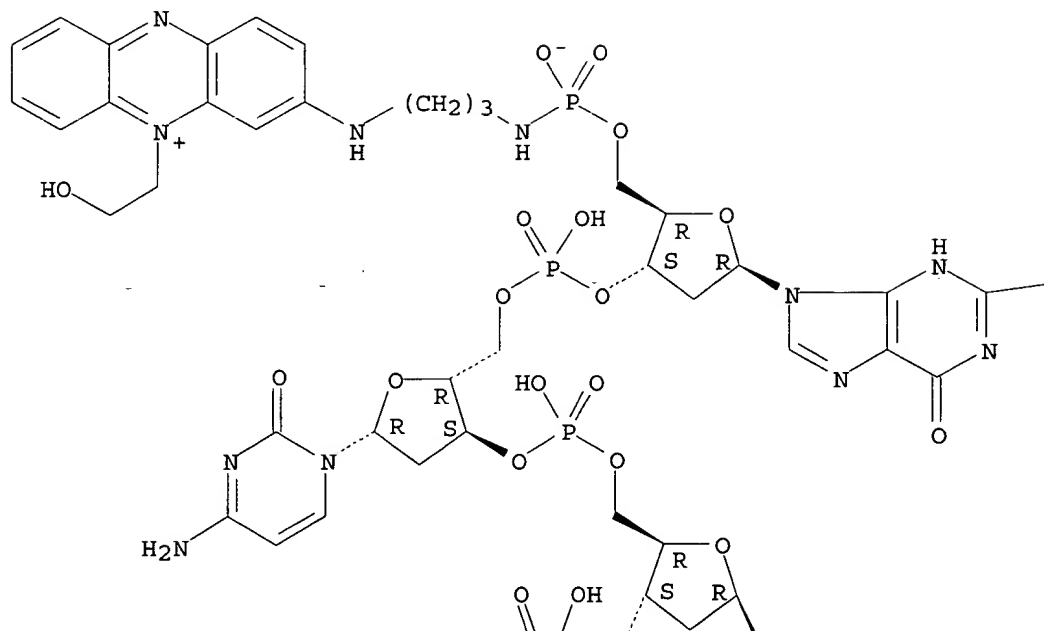
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

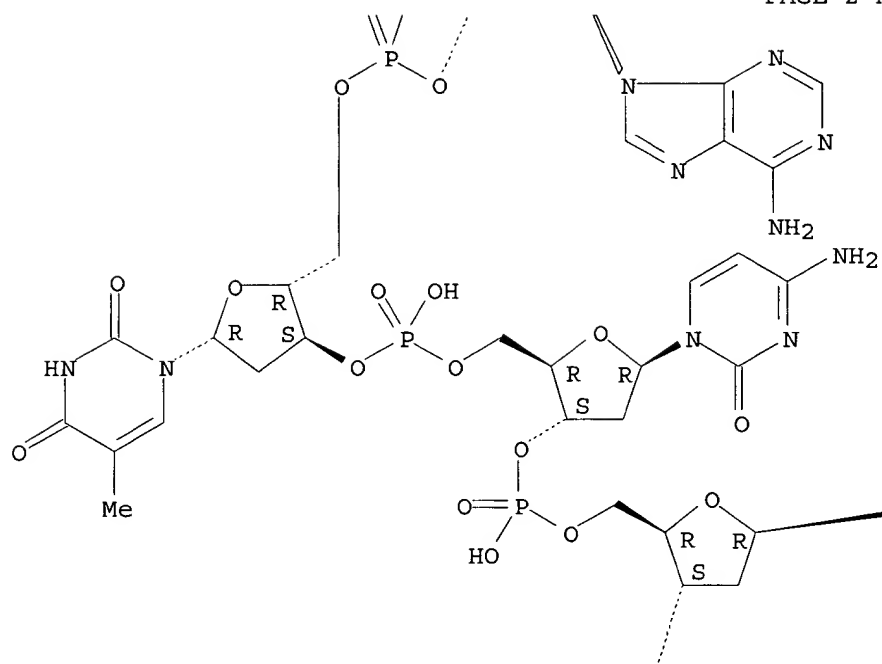
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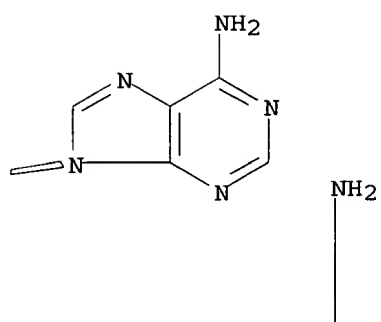
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NH₂

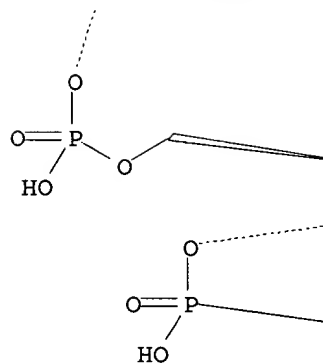
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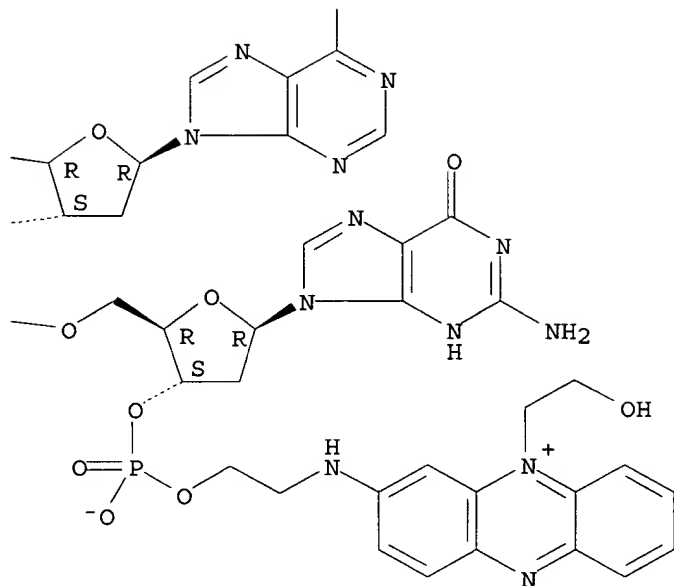
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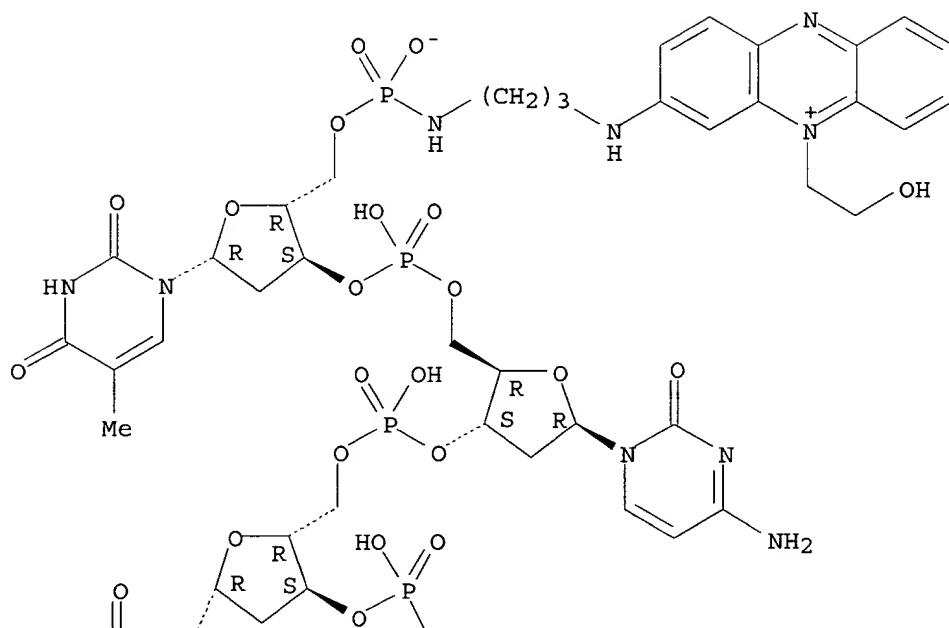
CM 3

CRN 177079-71-9

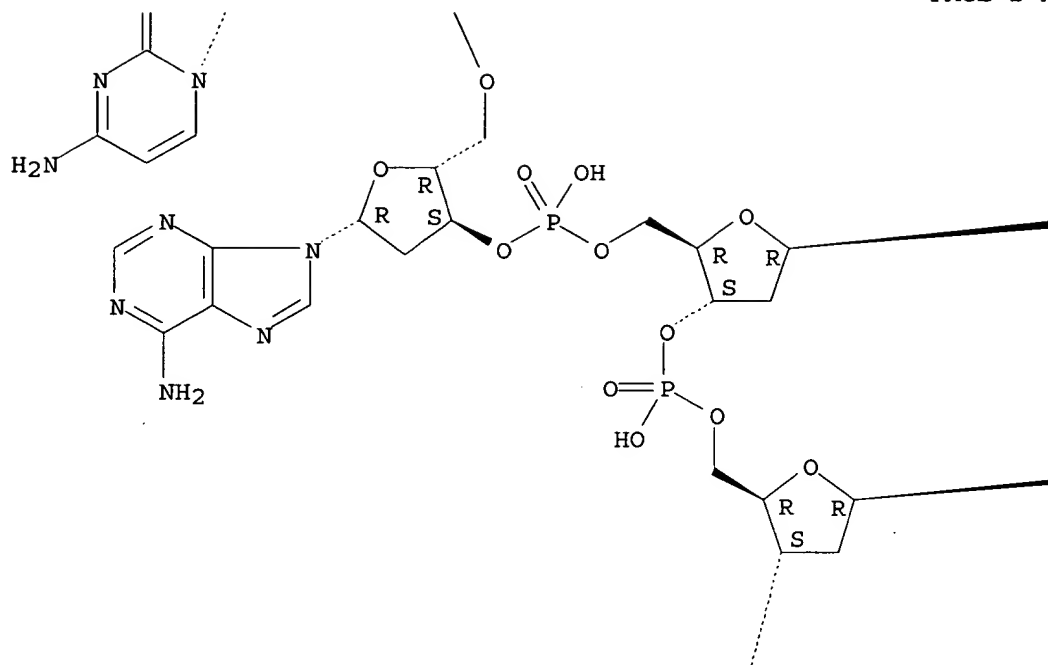
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

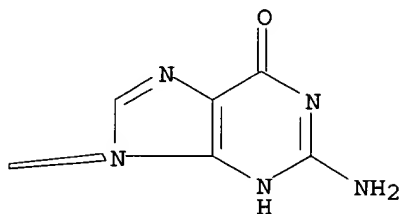
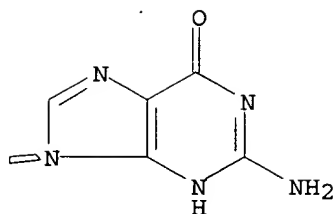
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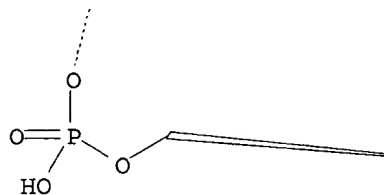
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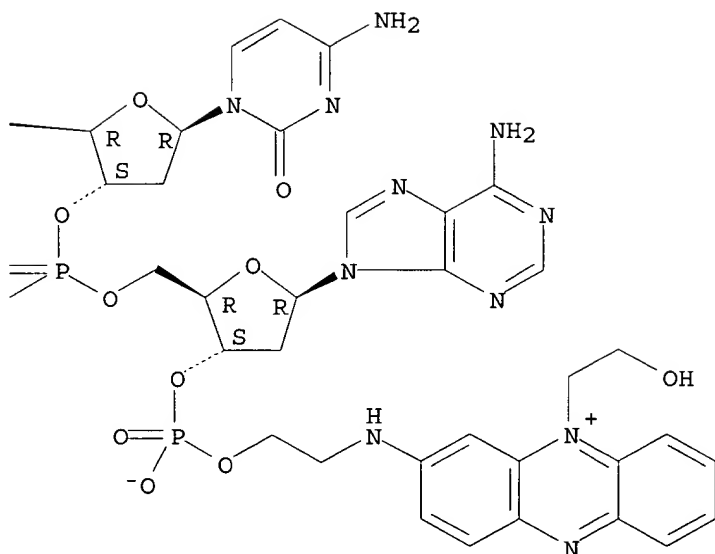
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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-01-0 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenosine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-

2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]
 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
 adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

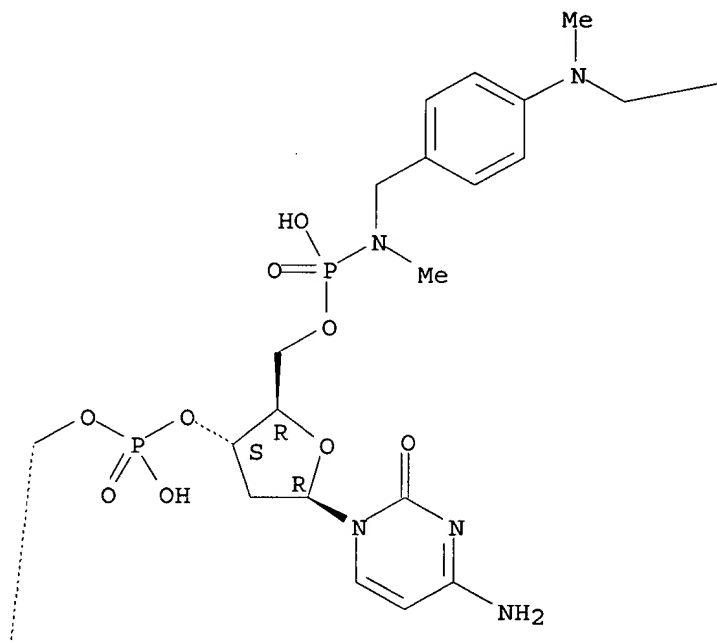
CM 1

CRN 201488-14-4

CMF C50 H65 Cl N20 O22 P4

Absolute stereochemistry.

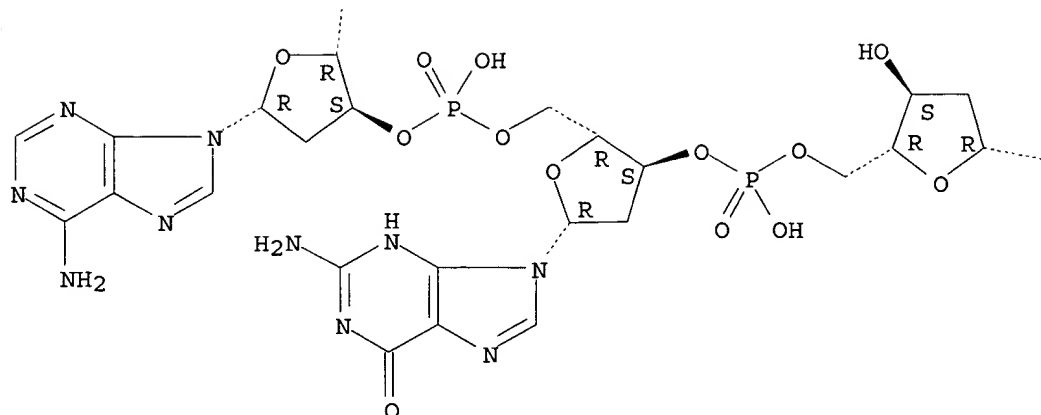
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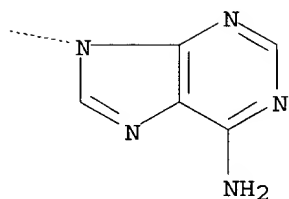
PAGE 1-B

—CH₂Cl

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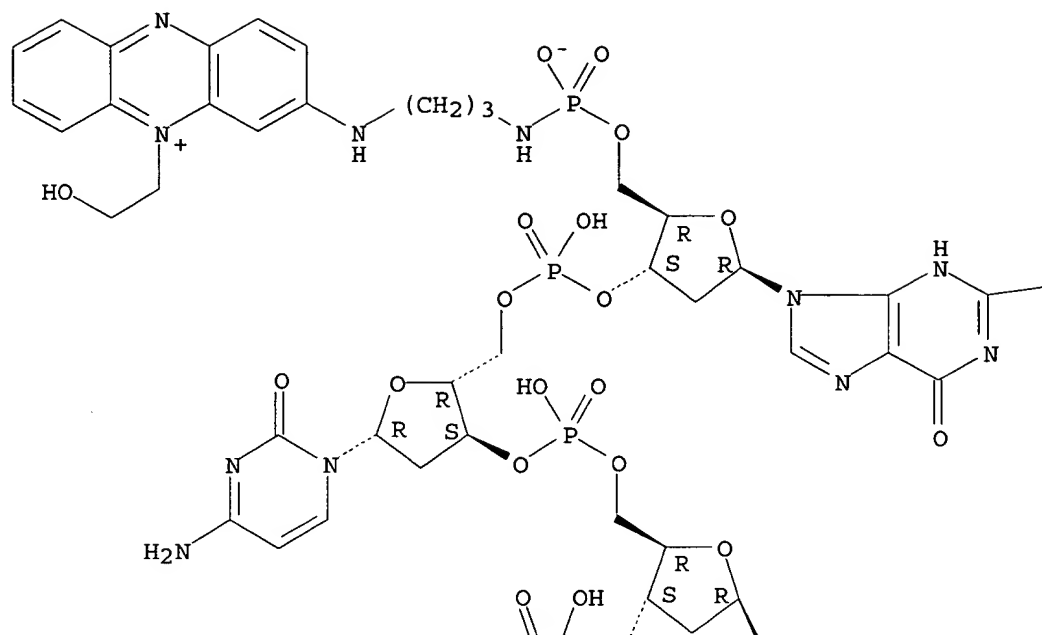
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

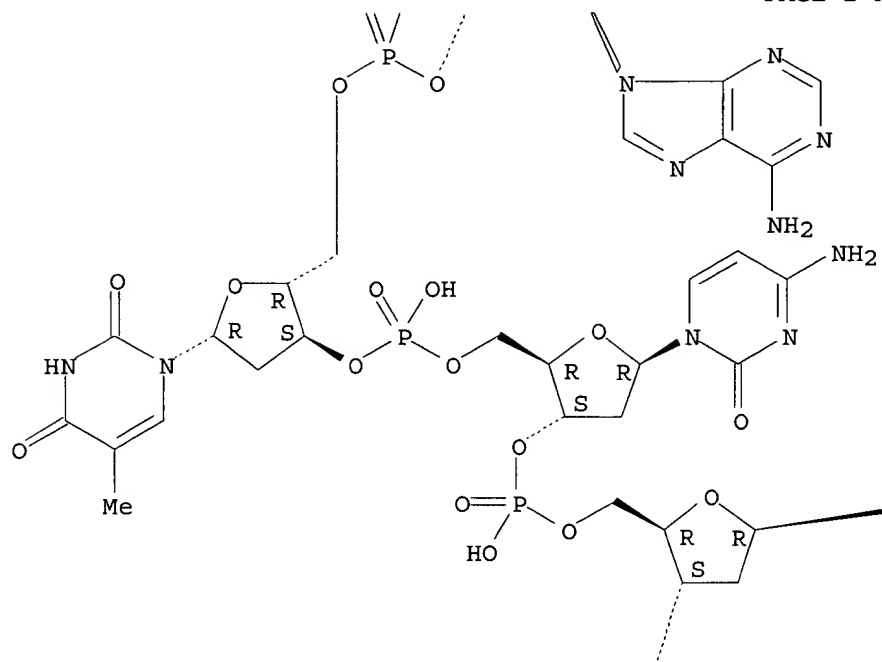
PAGE 1-A



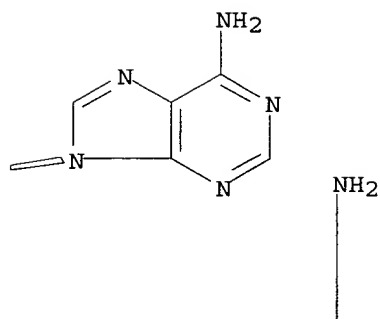
PAGE 1-B

NH₂

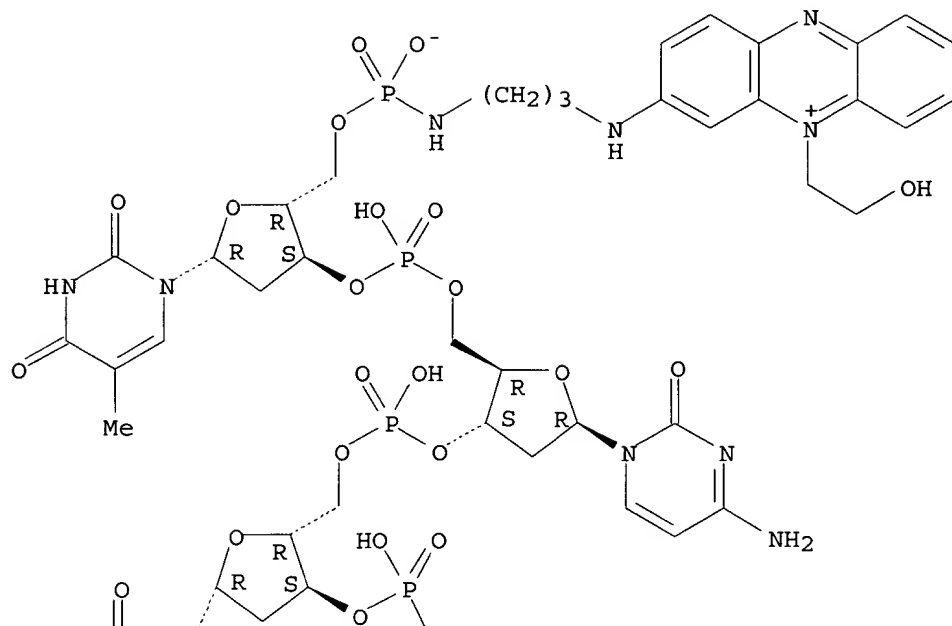
PAGE 2-A



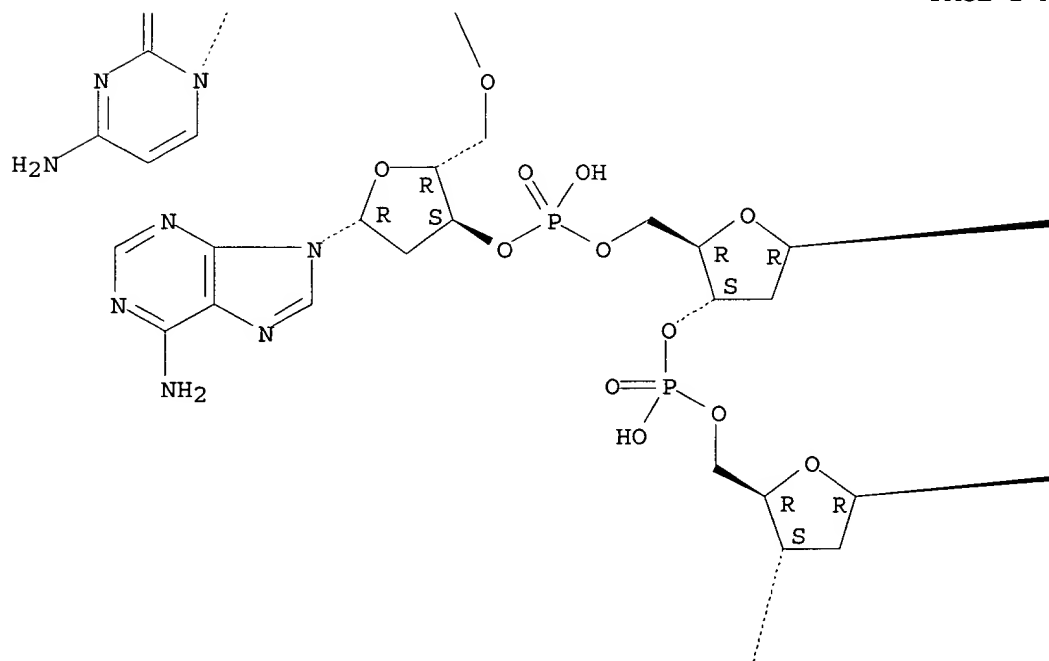
PAGE 2-B



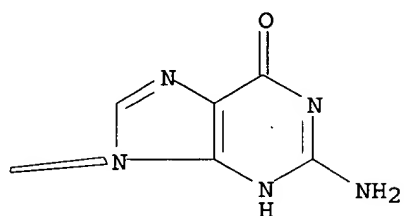
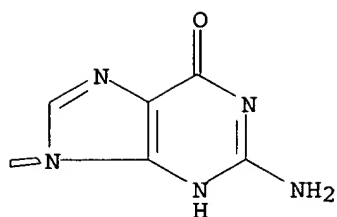
PAGE 1-A



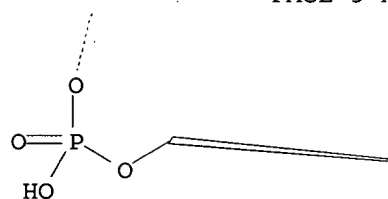
PAGE 2-A



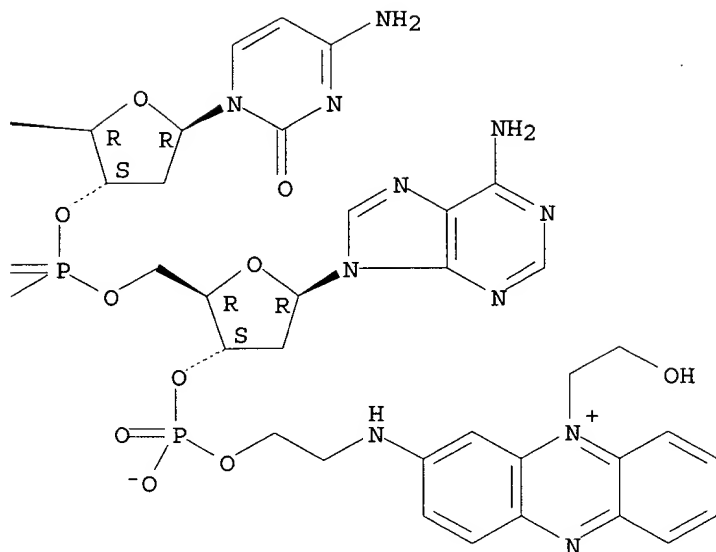
PAGE 2-B



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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-02-1 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanosine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

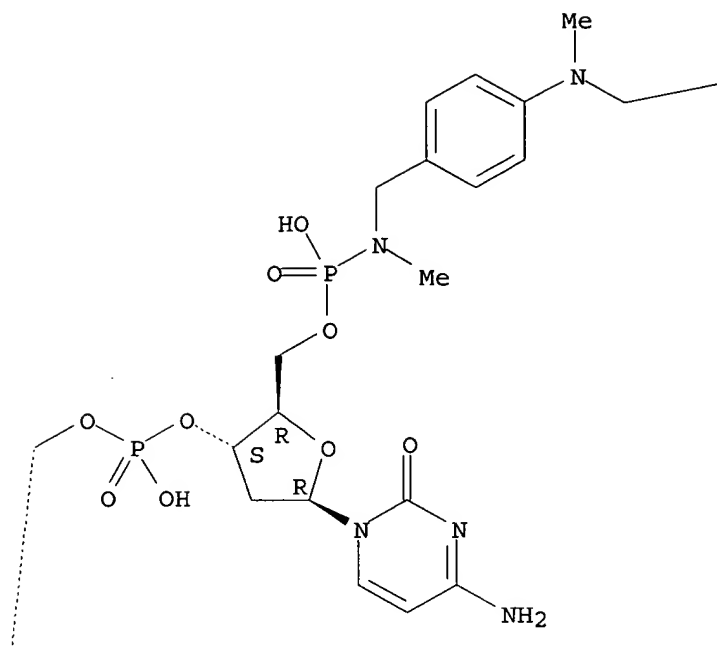
CM 1

CRN 206431-73-4

CMF C50 H65 Cl N20 O23 P4

Absolute stereochemistry.

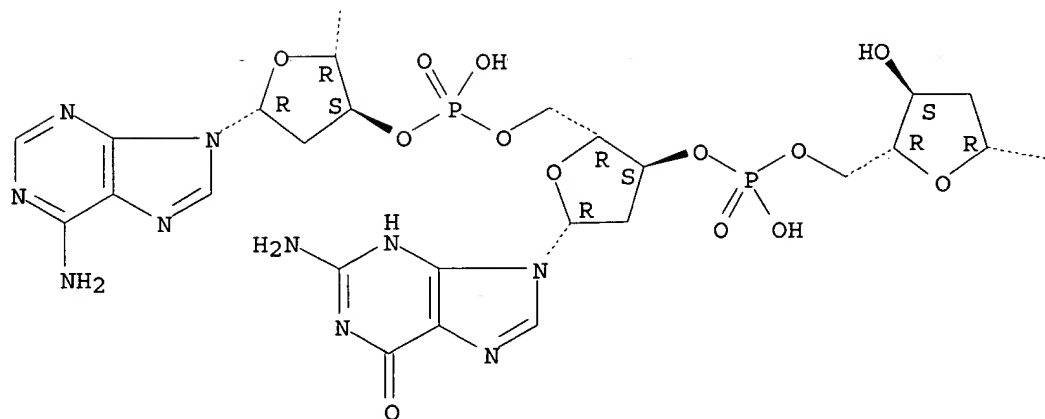
PAGE 1-A



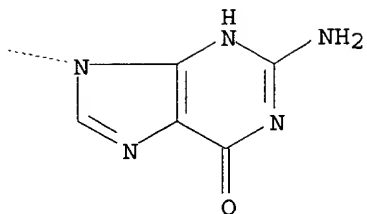
PAGE 1-B

—CH₂Cl

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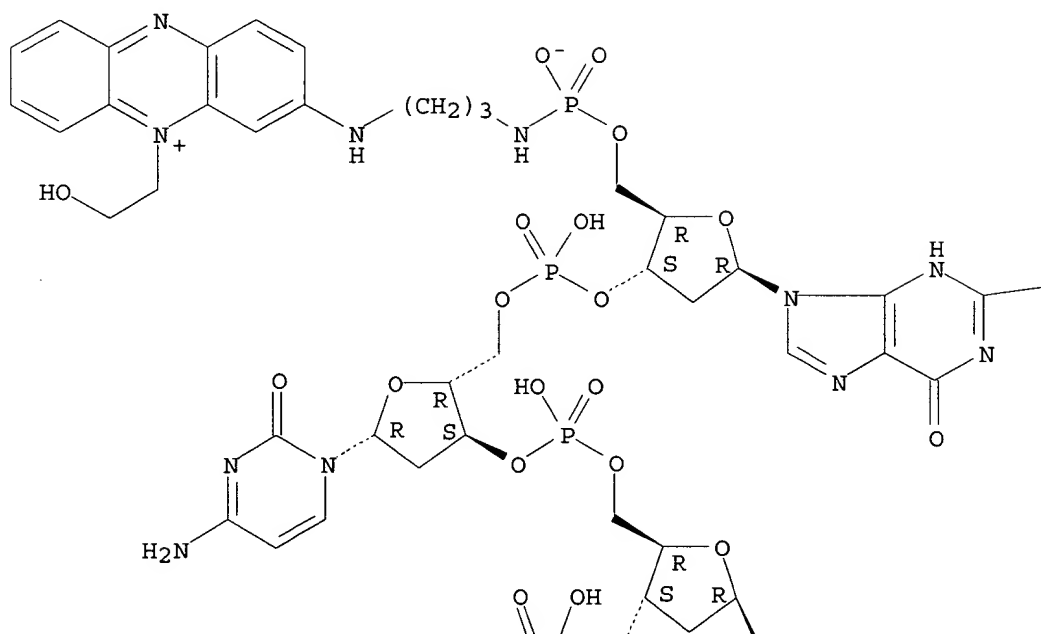
CM 2

CRN 177079-72-0

CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

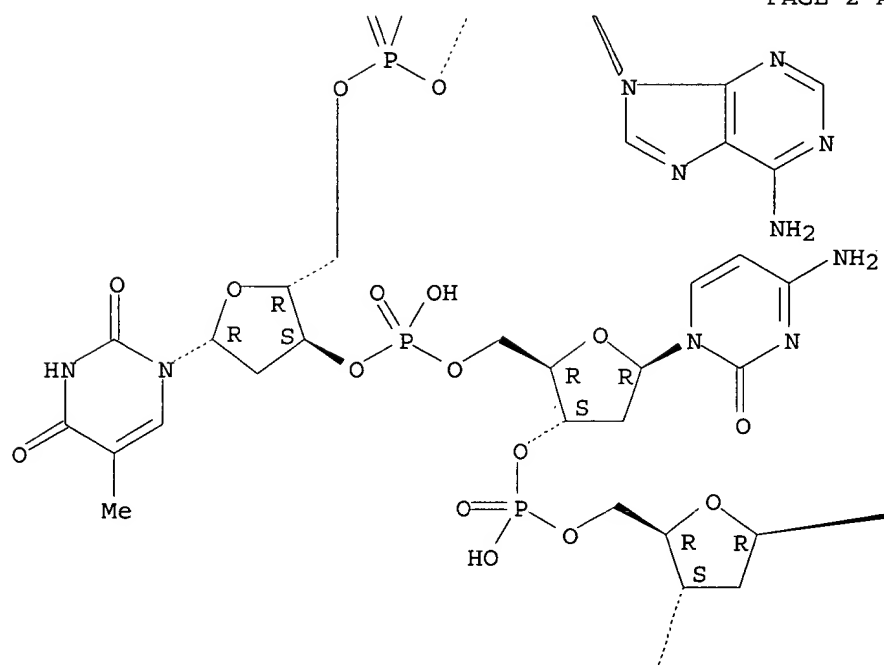
PAGE 1-A



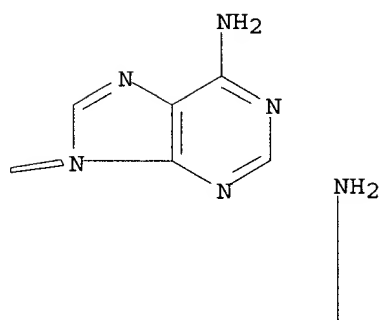
PAGE 1-B

NH₂

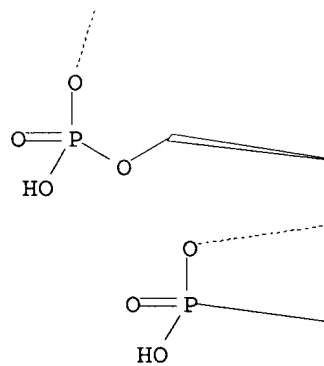
PAGE 2-A



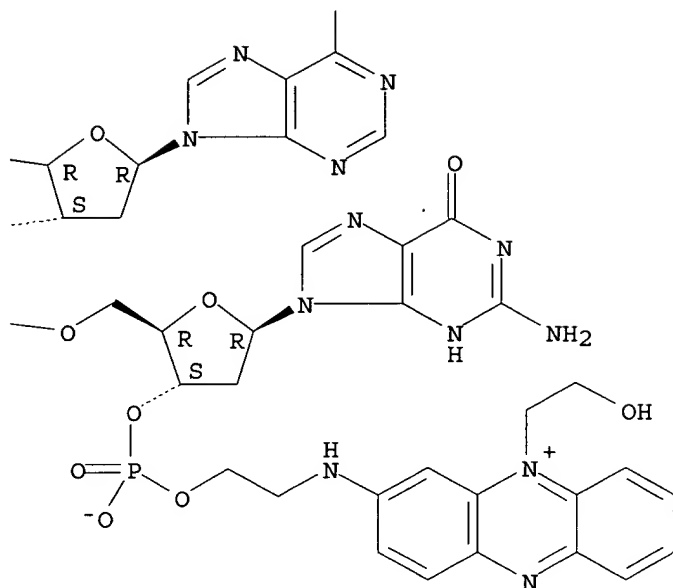
PAGE 2-B



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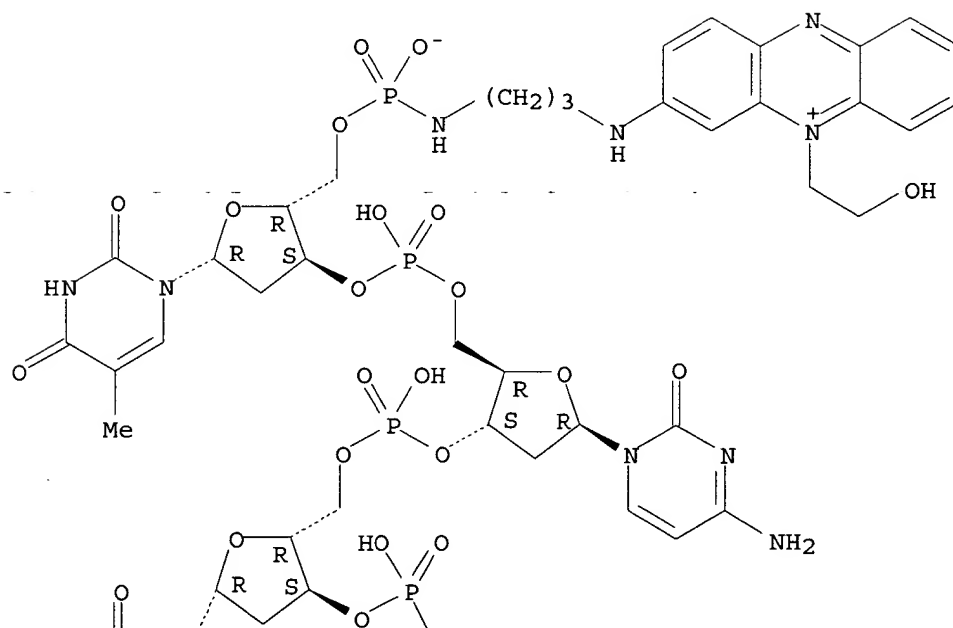
CM 3

CRN 177079-71-9

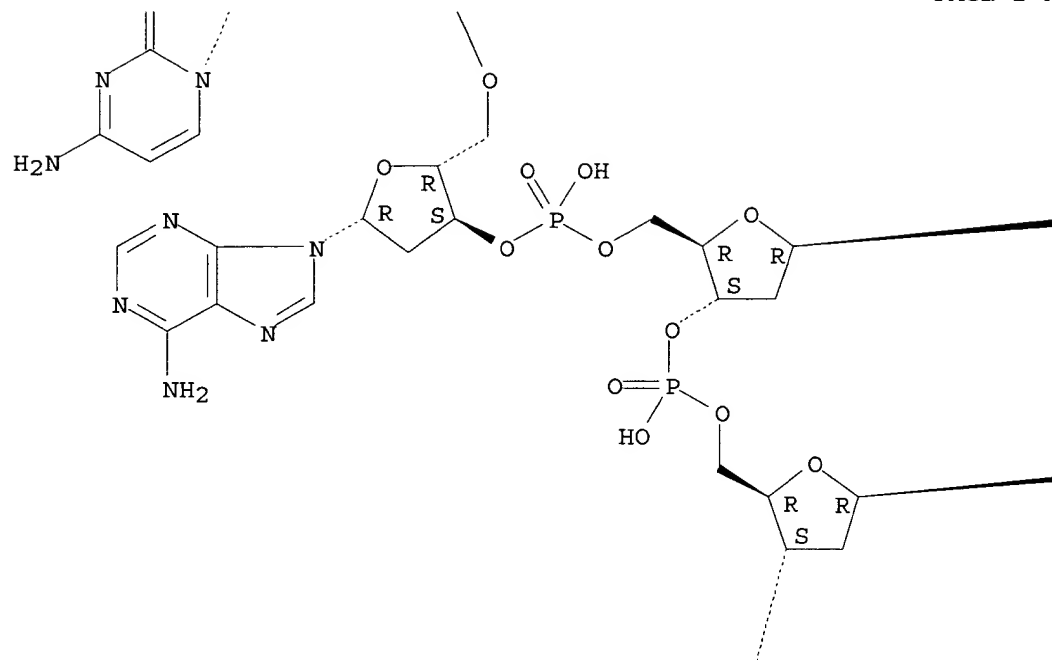
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

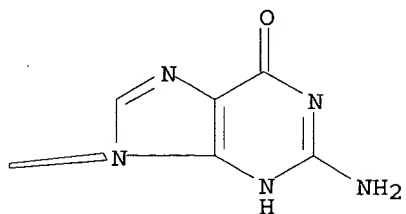
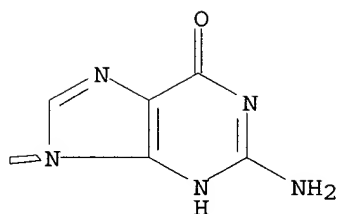
PAGE 1-A



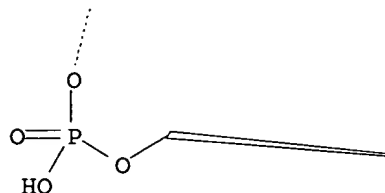
PAGE 2-A



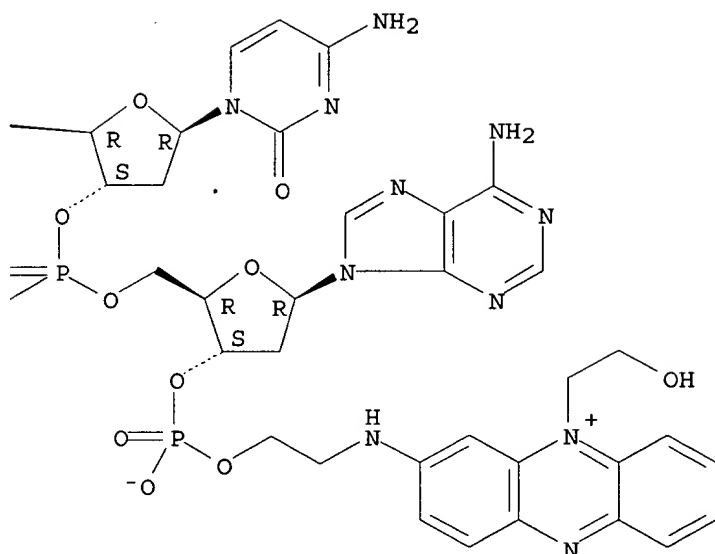
PAGE 2-B



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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-07-6 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate inner salt, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-

yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate
 inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[4-[(2-
 chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-3'-thymidylate (1:1:1:1) (9CI) (CA INDEX
 NAME)

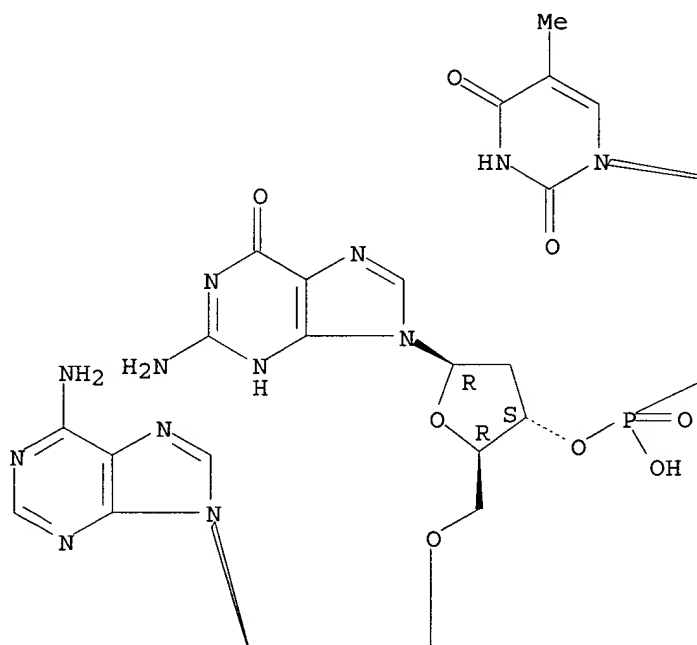
CM 1

CRN 206431-79-0

CMF C68 H87 Cl N17 O28 P5

Absolute stereochemistry.

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The chemical structure shows a steroid nucleus with a phosphate group at the 3-position. The phosphate group is linked to a ribose sugar. The ribose sugar has a methyl group at the 2-position and a methoxy group at the 4-position. The stereochemistry is indicated by R and S labels at various positions: C-2 (R), C-3 (S), C-4 (R), C-13 (S), C-14 (H), C-15 (S), C-16 (R), C-17 (H), and C-20 (S). The steroid nucleus has a ketone group at C-20.

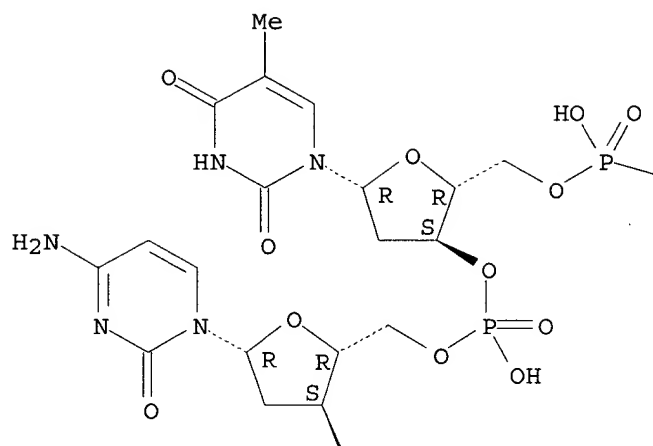
[illegible]
$$\begin{array}{c} \diagup \\ \text{ClCH}_2 \end{array} \quad \begin{array}{c} \diagdown \quad \diagup \\ \text{N} \\ | \\ \text{Me} \end{array}$$

CRN 204335-58-0

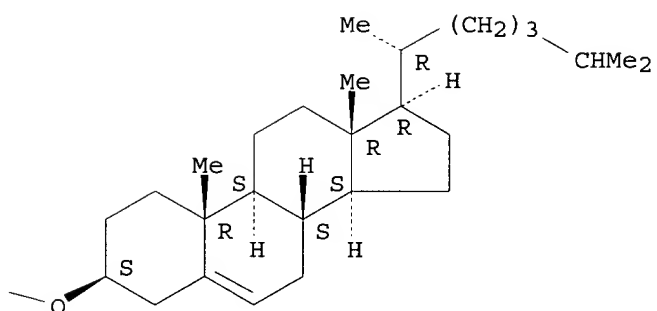
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

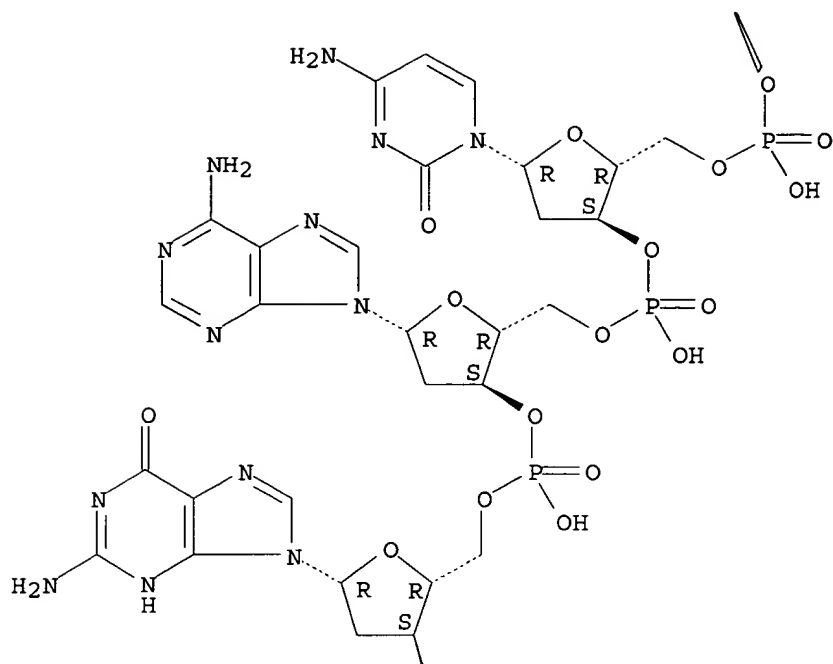
PAGE 1-A



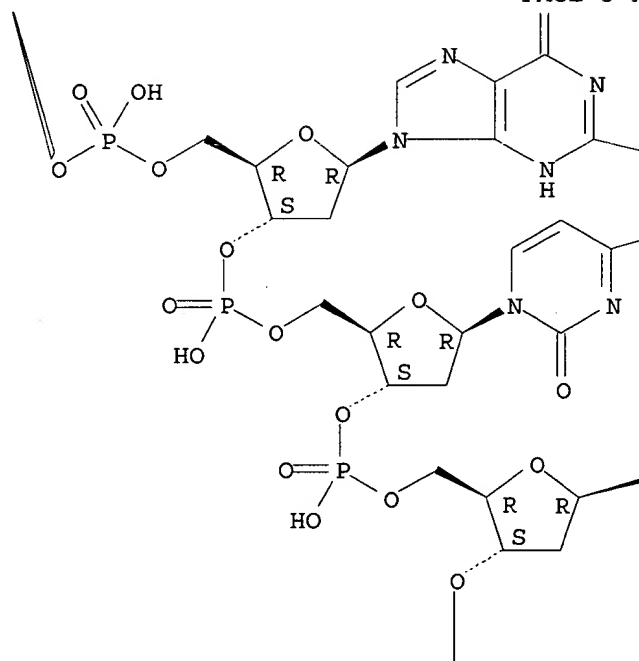
PAGE 1-B



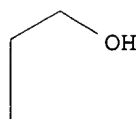
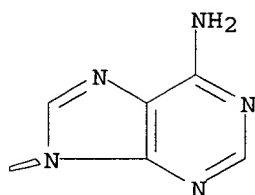
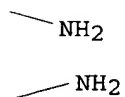
PAGE 2-A



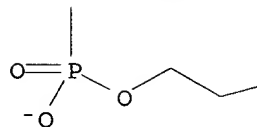
PAGE 3-A



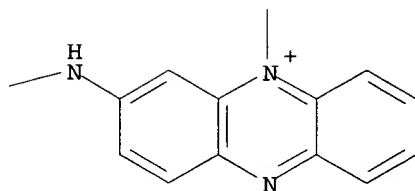
PAGE 3-B



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PAGE 4-B



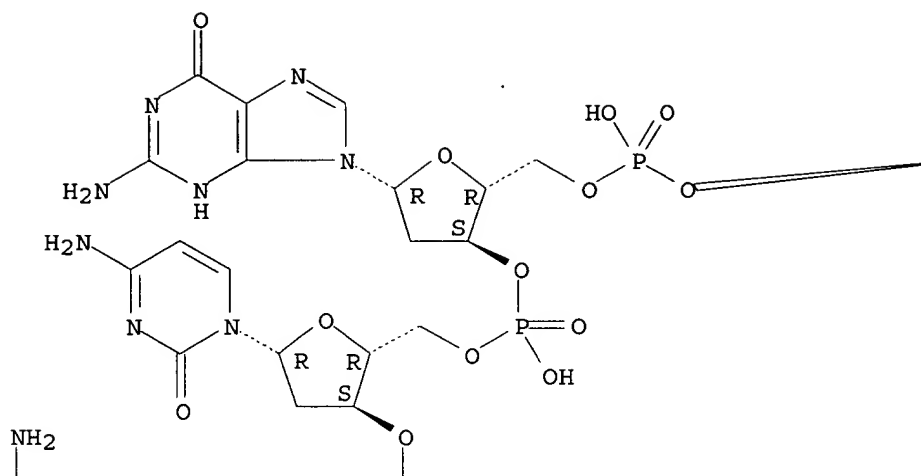
CM 3

CRN 204335-57-9

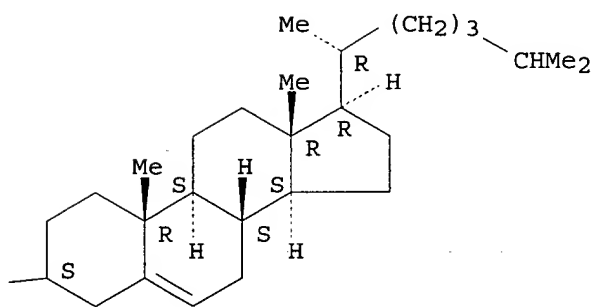
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

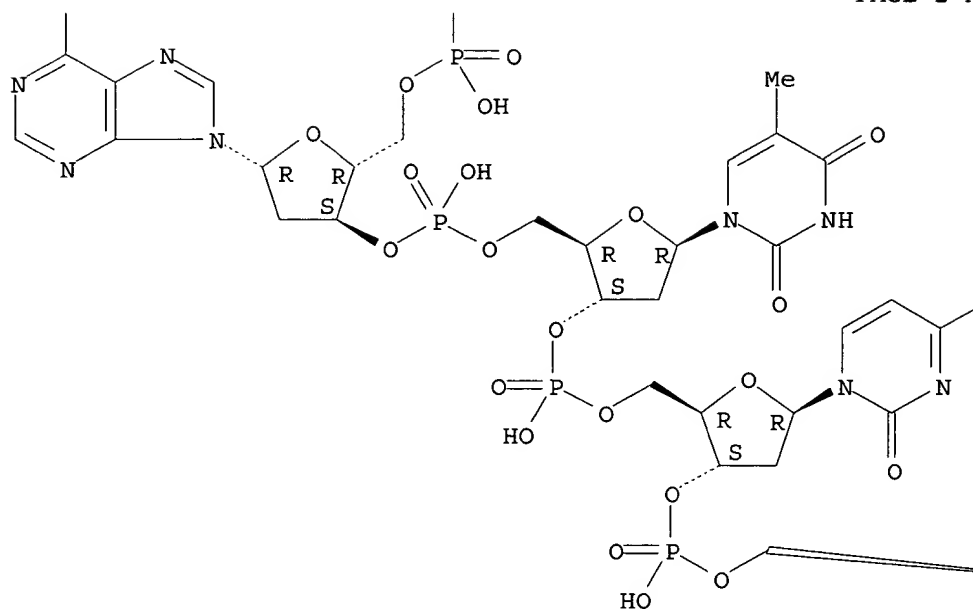
PAGE 1-A



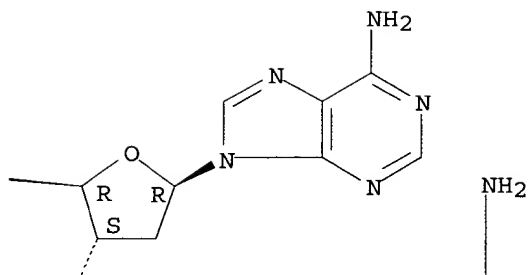
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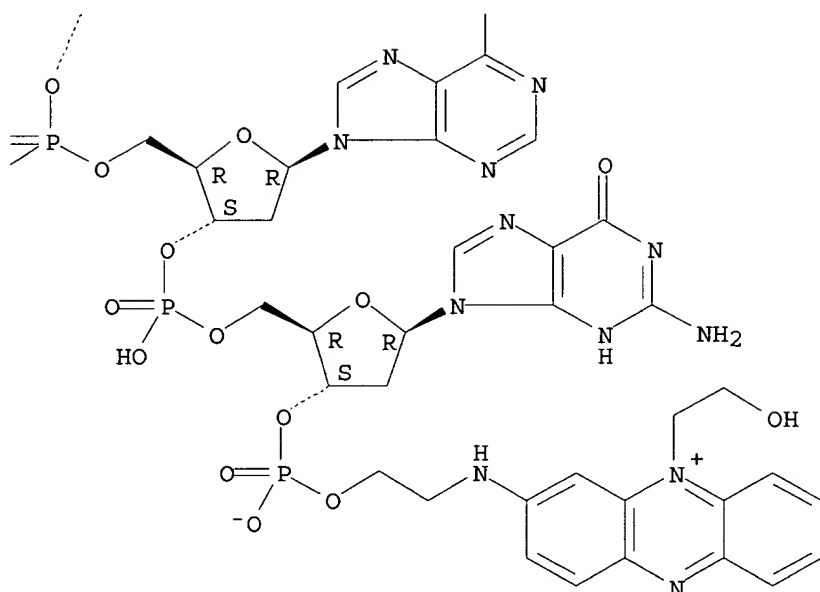
PAGE 2-B

NH₂

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CM 4

CRN 150227-65-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-08-7 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate inner salt, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylylate inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-

deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxy-3'-adenylate (1:1:1:1) (9CI) (CA
INDEX NAME)

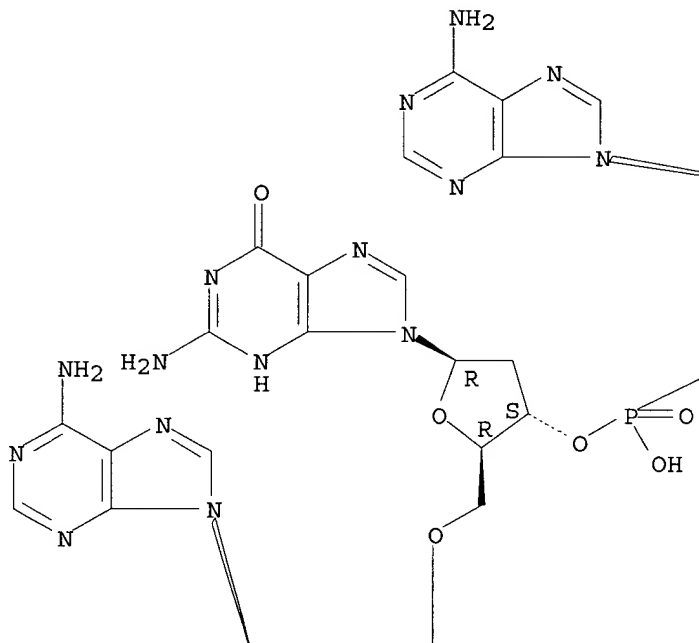
CM 1

CRN 206431-83-6

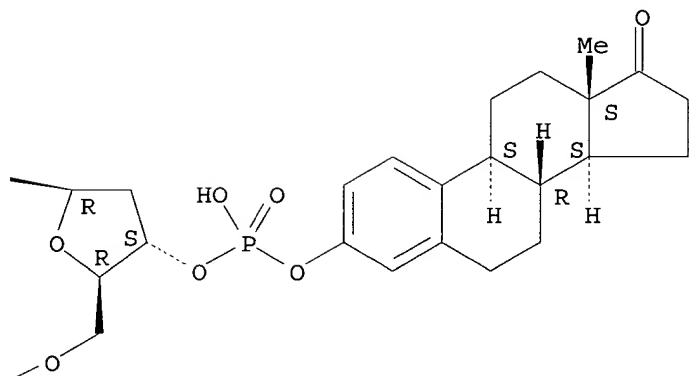
CMF C68 H86 Cl N20 O26 P5

Absolute stereochemistry.

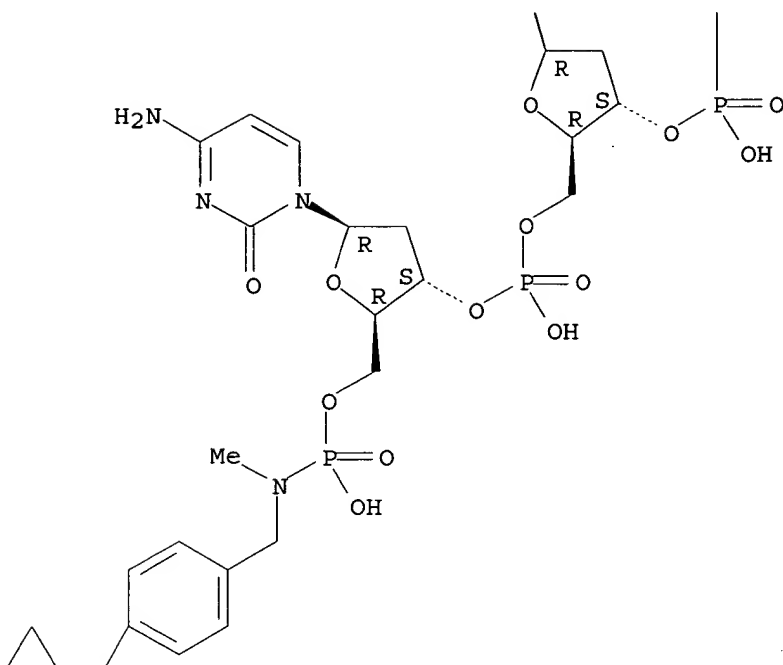
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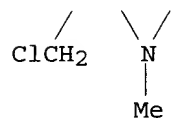
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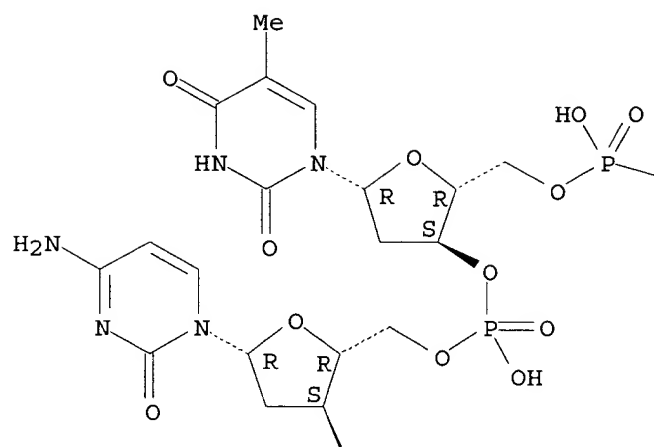
CM 2

CRN 204335-58-0

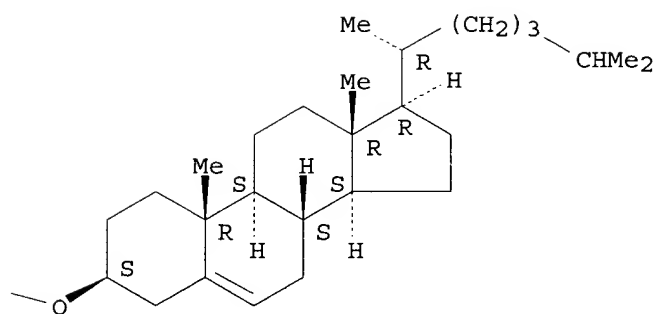
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

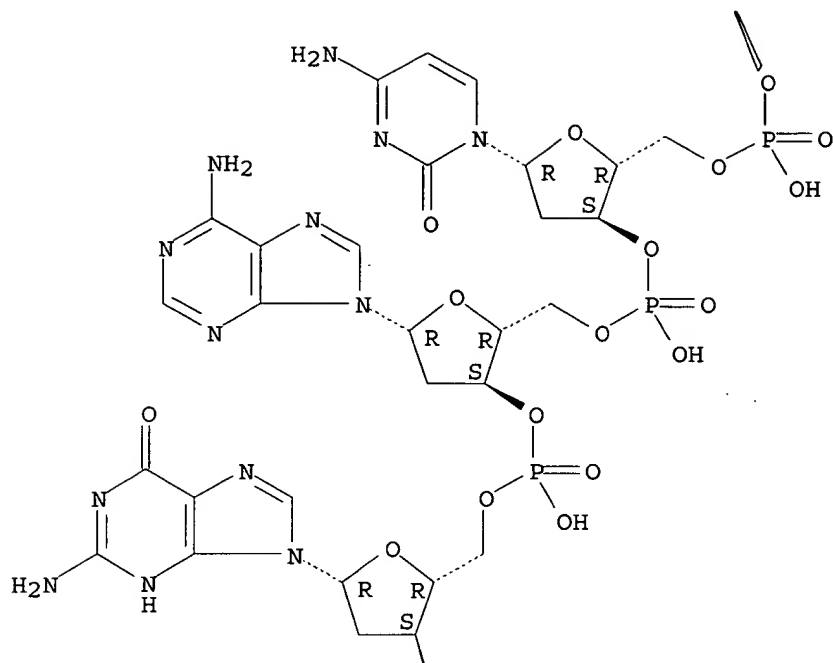
PAGE 1-A



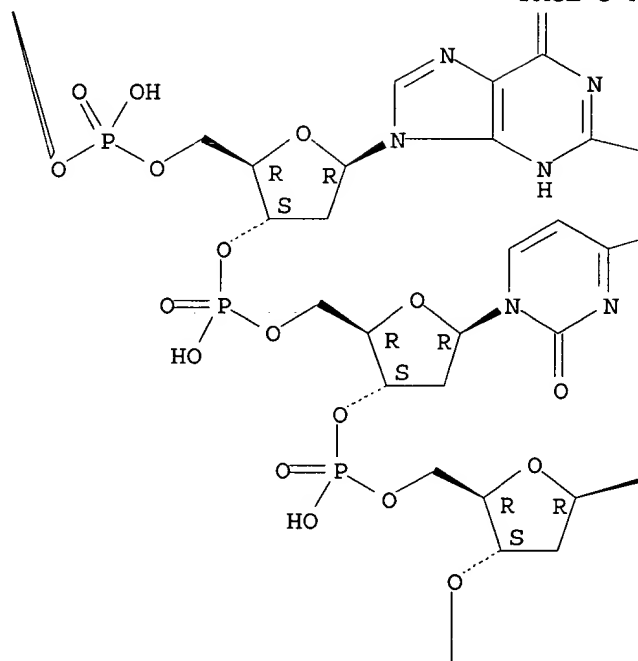
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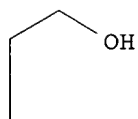
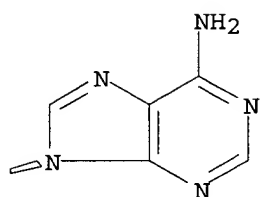
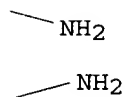
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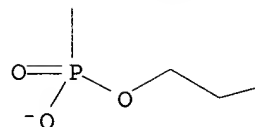
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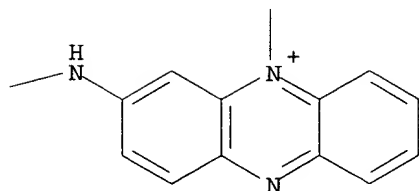
PAGE 3-B



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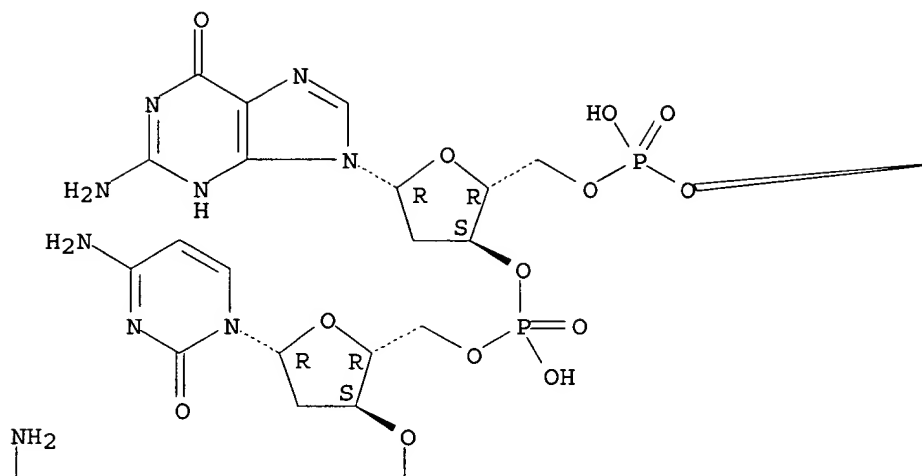
CM 3

CRN 204335-57-9

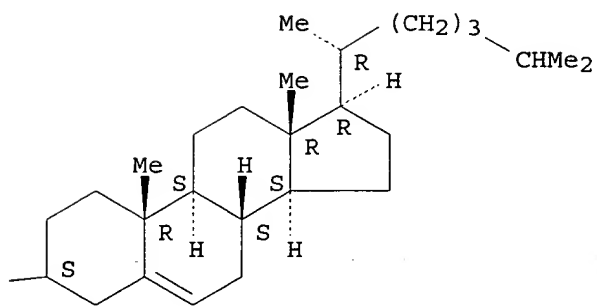
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

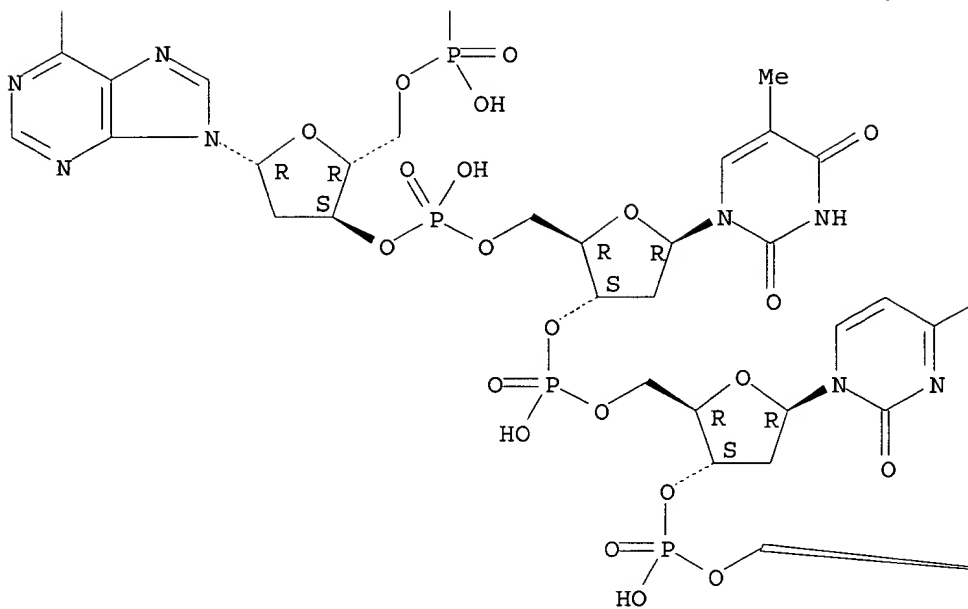
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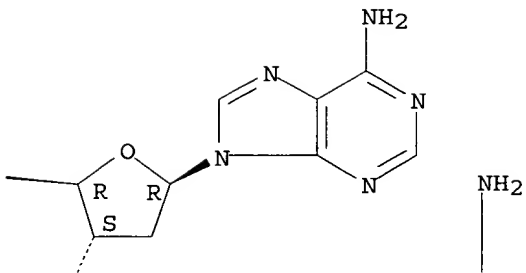
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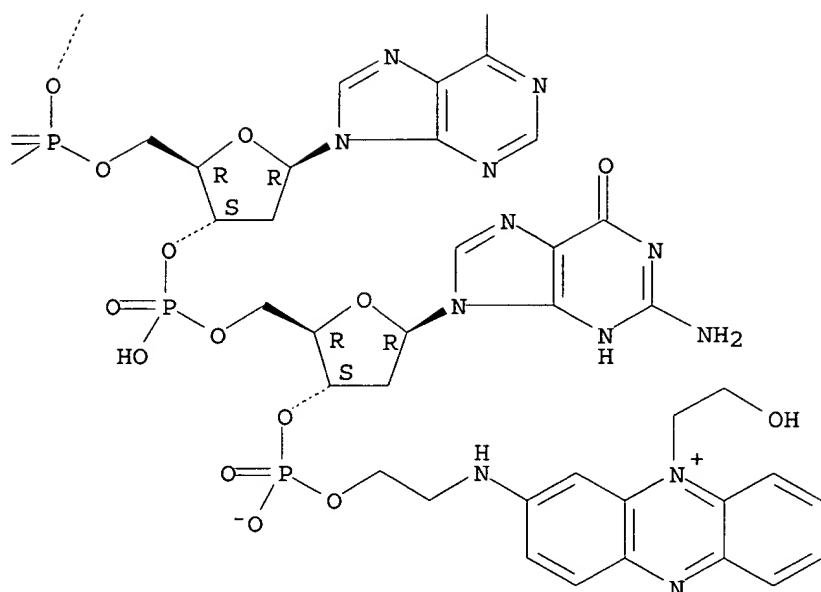
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 NH_2 

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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-09-8 CAPLUS

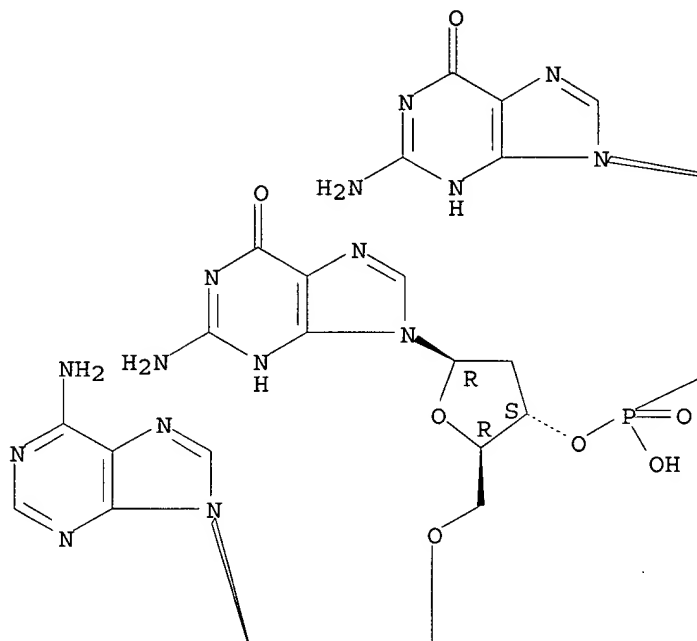
CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate inner salt, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylylate inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-

CM 1

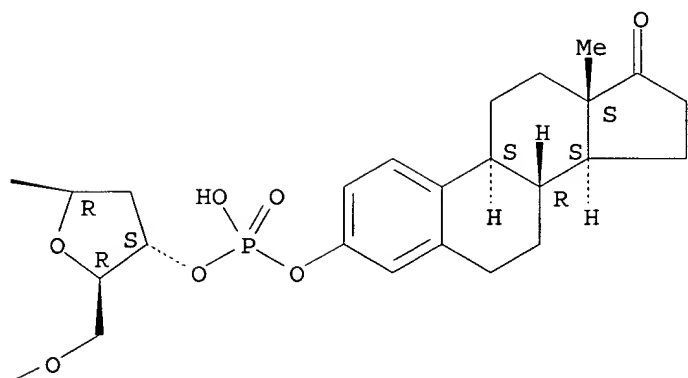
CMF C68 H86 C1 N20 O27 P5

Absolute stereochemistry.

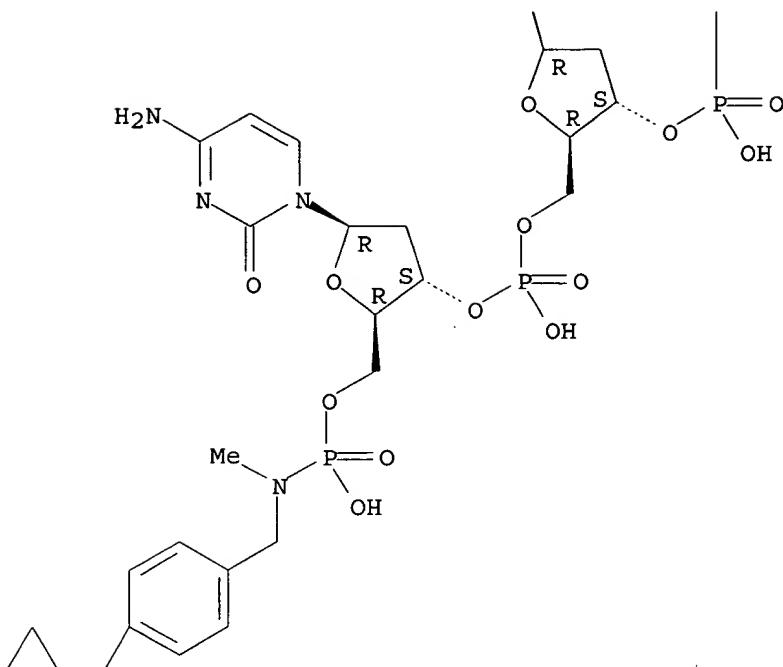
PAGE 1-A



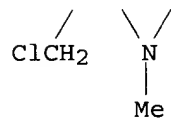
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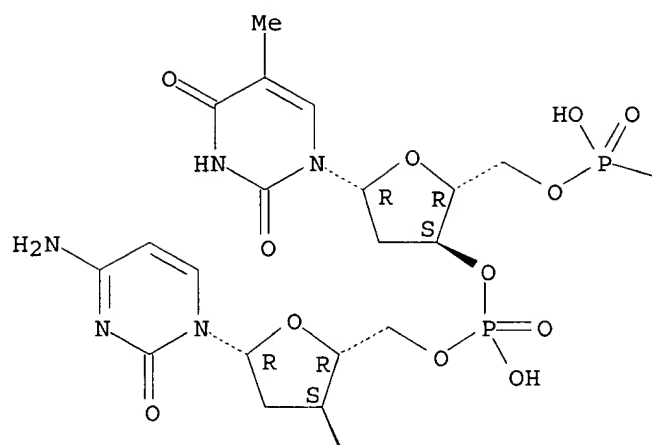
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CRN 204335-58-0

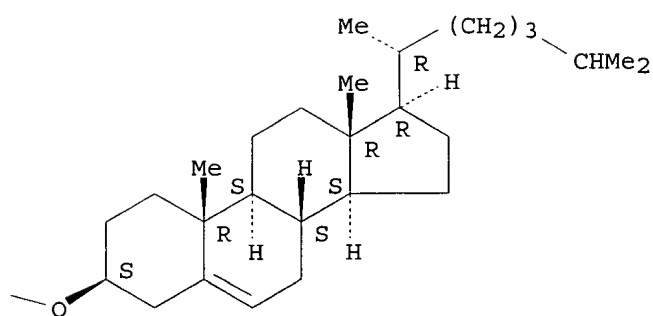
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

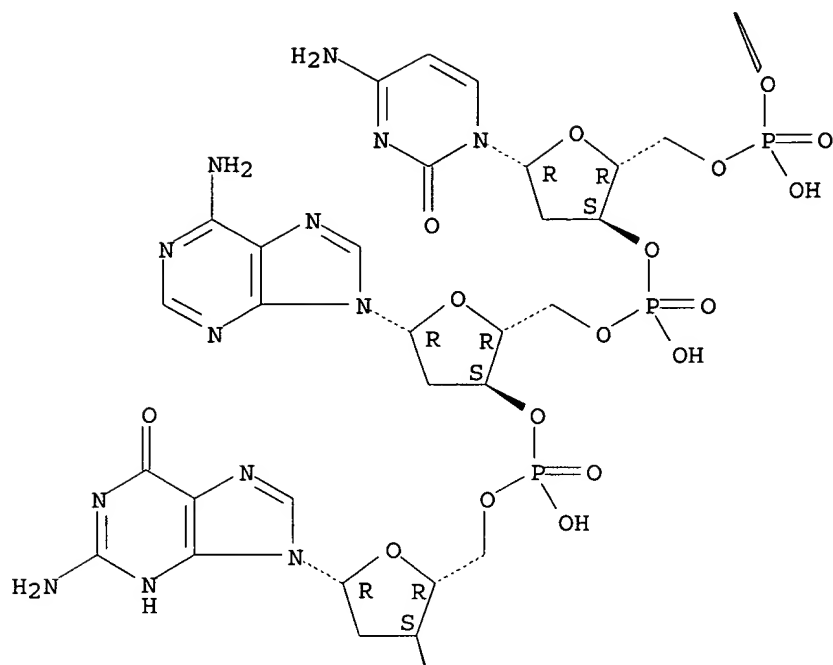
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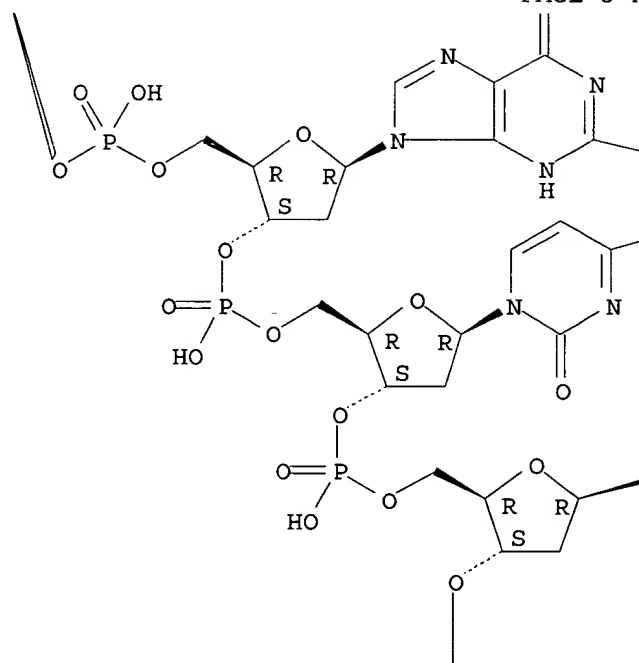
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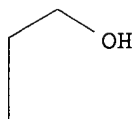
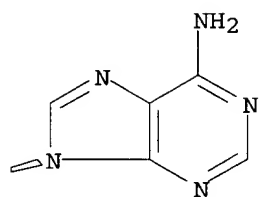
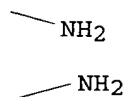
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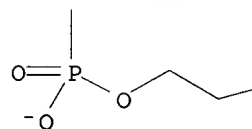
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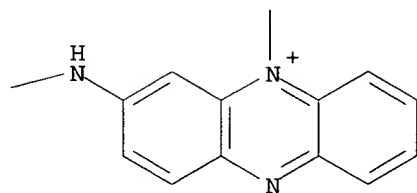
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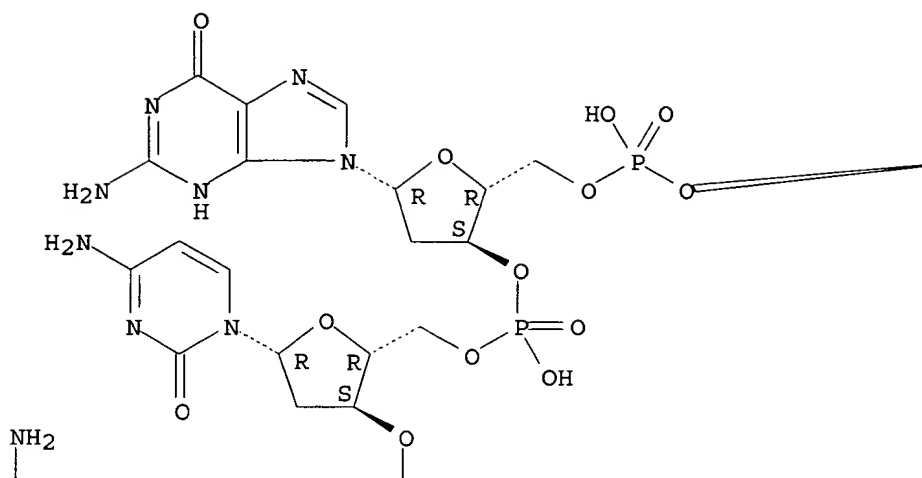
CM 3

CRN 204335-57-9

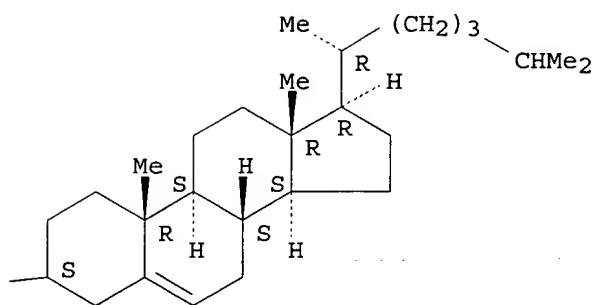
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

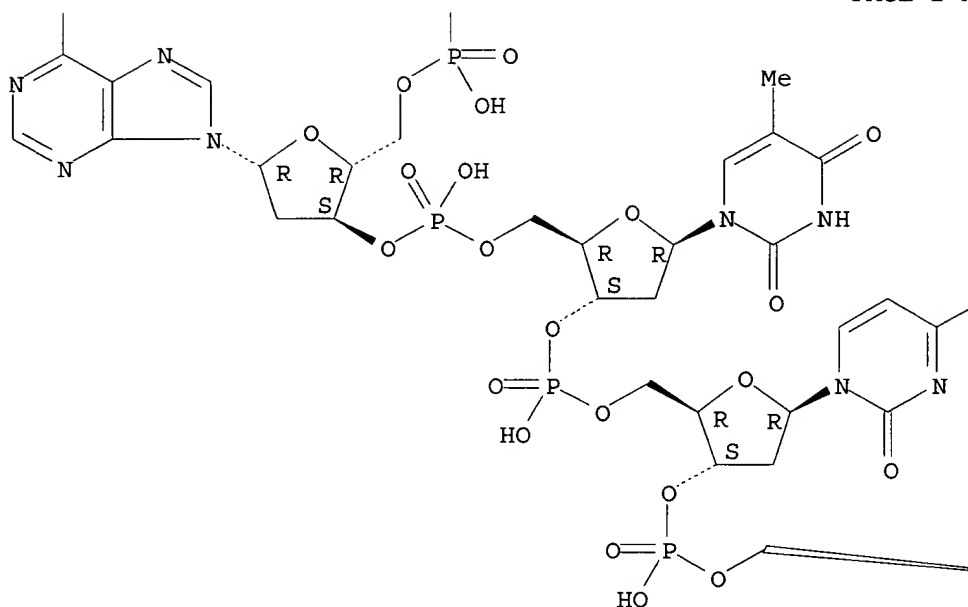
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PAGE 1-B

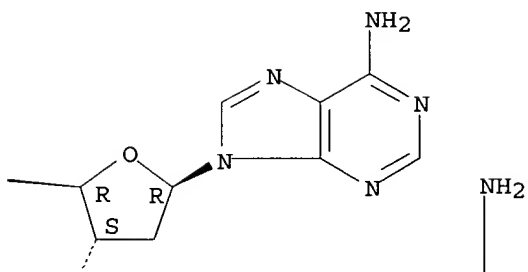


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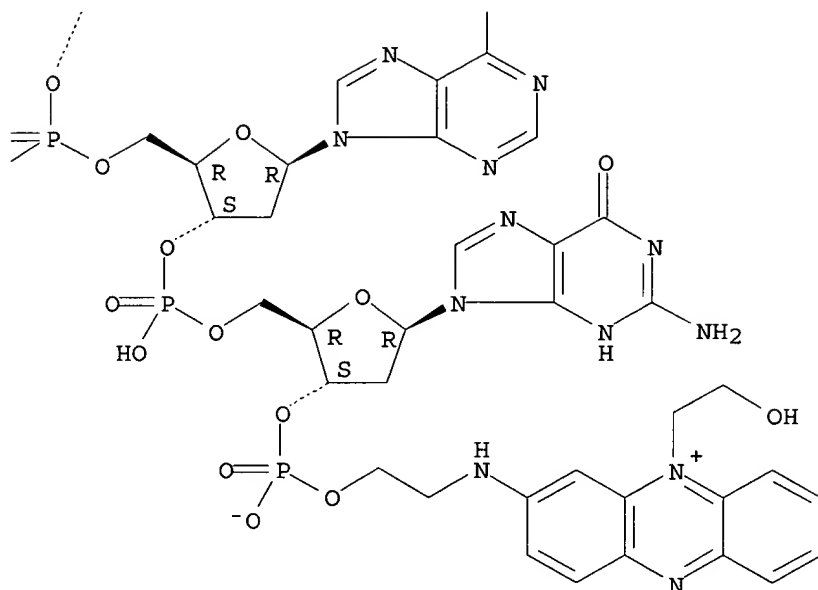
NH₂



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CM 4

CRN 150227-65-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 206978-11-2 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate inner salt, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-3'-adenylylate inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[4-[(2-chloroethyl)methylamino]phenyl]methyl]methylamino]hydroxyphosphinyl]-2'-

deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
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INDEX NAME)

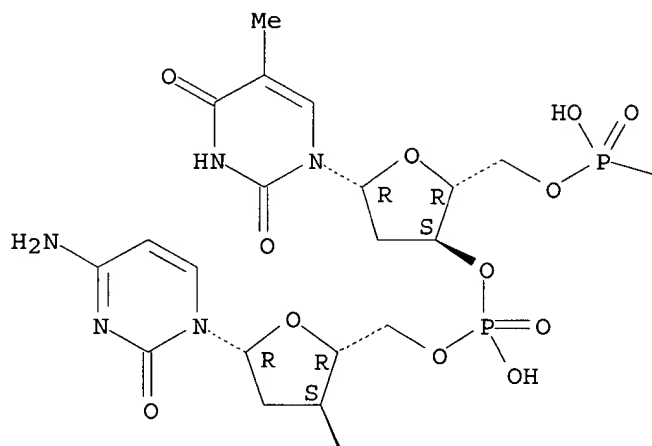
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CRN 204335-58-0

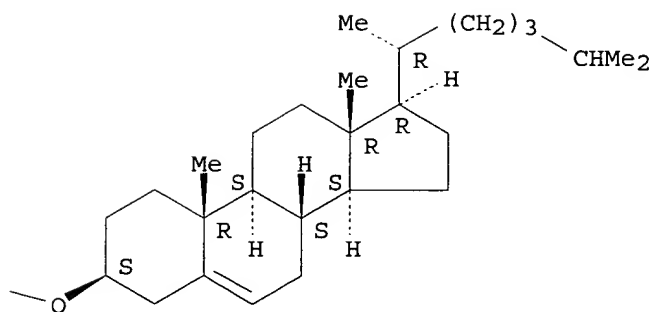
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

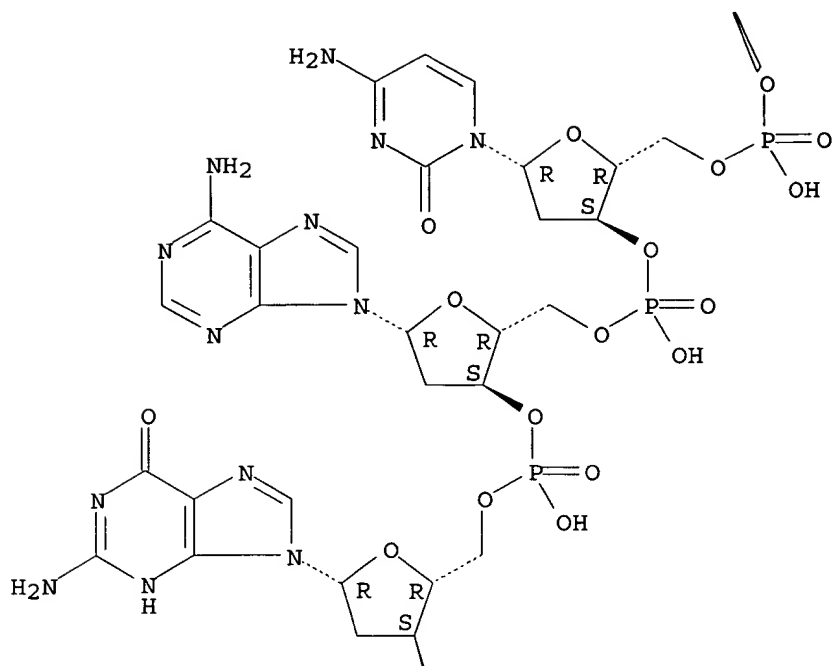
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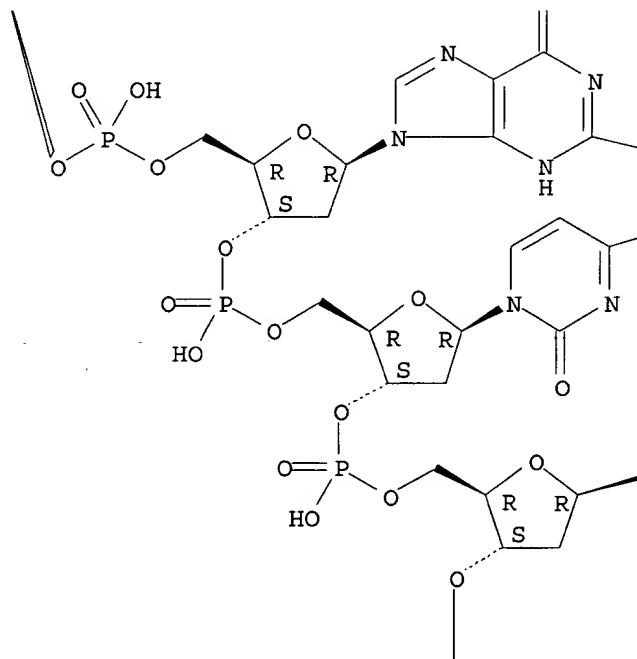
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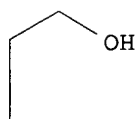
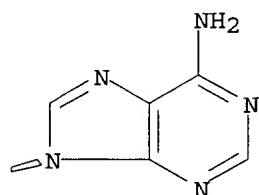
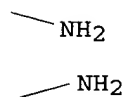
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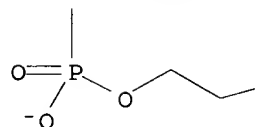
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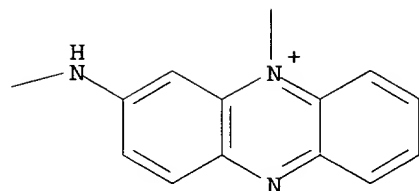
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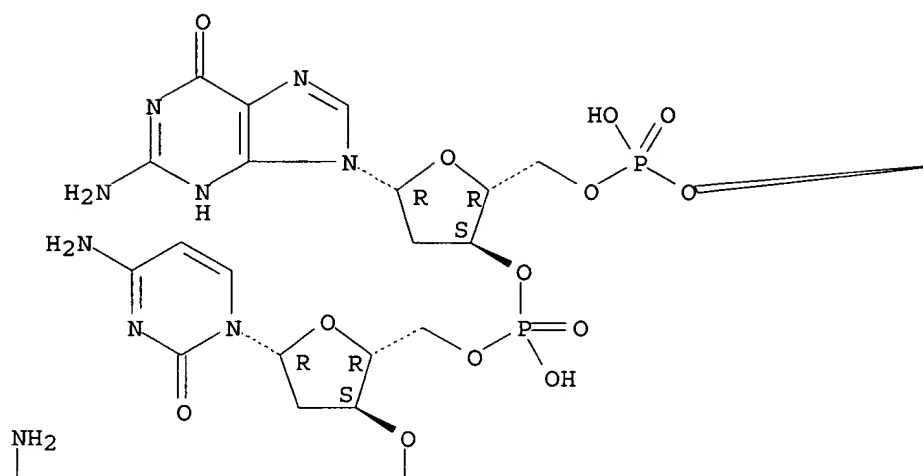
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CRN 204335-57-9

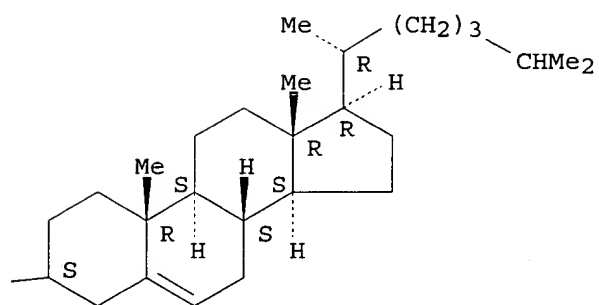
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

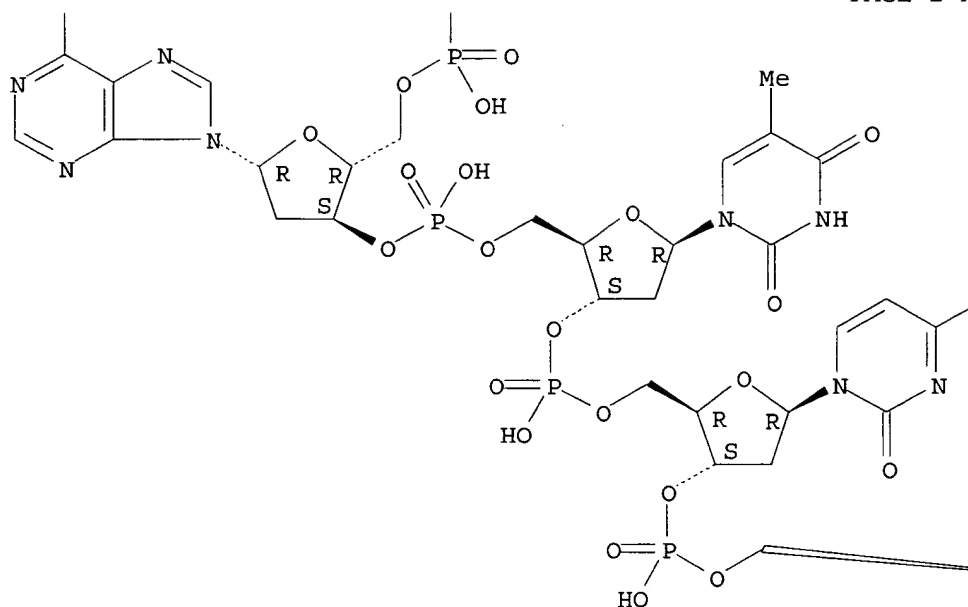
PAGE 1-A



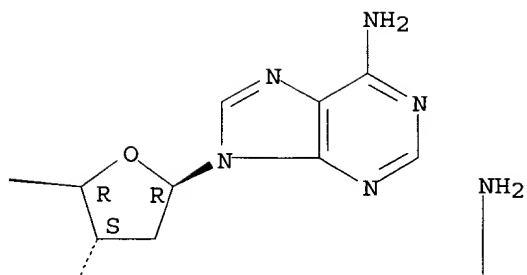
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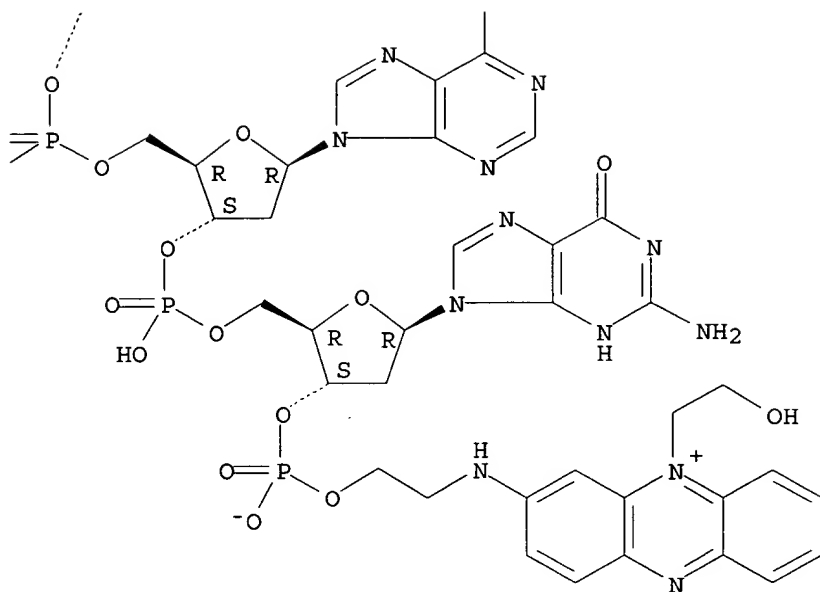
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NH₂

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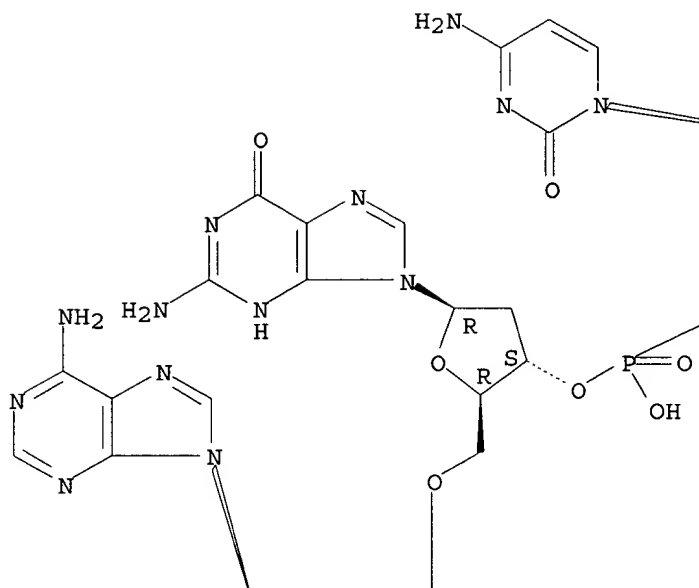
CM 3

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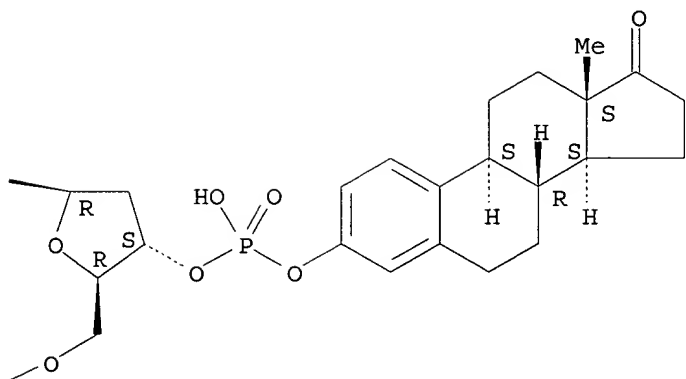
CMF C67 H86 Cl N18 O27 P5

Absolute stereochemistry.

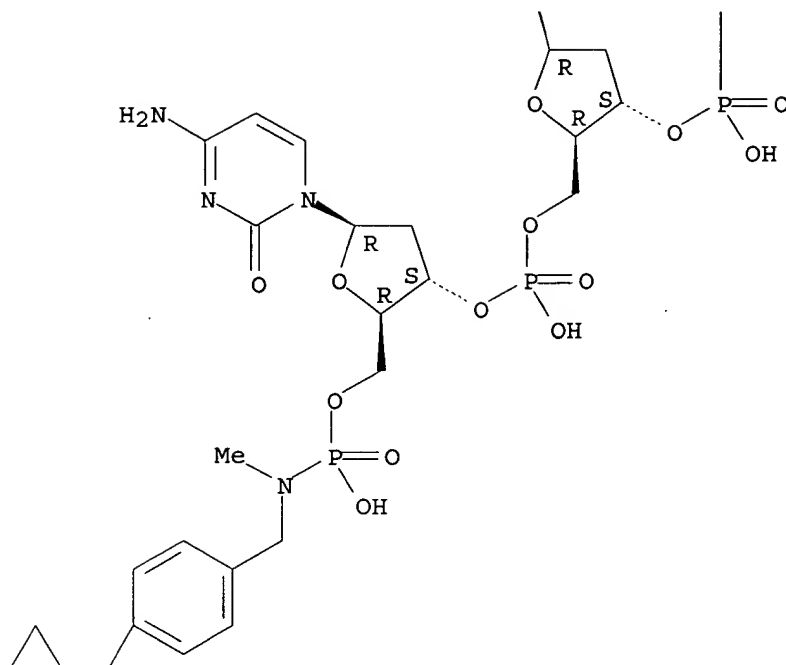
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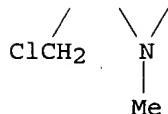
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CM 4

CRN 150227-65-9
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 14 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:39494 CAPLUS

DOCUMENT NUMBER: 128:240835

TITLE: Interaction of short oligonucleotide derivatives with nucleic acids. III. Photomodification of DNA targets using tandems of short oligonucleotide derivatives

AUTHOR(S): Tabatadze, D. R.; Tret'yakova, L. V.; Levina, A. S.; Pyshnyi, D. V.; Ivanova, E. M.; Zarytova, V. F.

CORPORATE SOURCE: Novosibirsk Institute Bioorganic Chemistry, Siberian Division, Russian Academy Sciences, Novosibirsk, 630090, Russia

SOURCE: Bioorganicheskaya Khimiya (1997), 23(8), 642-647
 CODEN: BIKHD7; ISSN: 0132-3423

PUBLISHER: MAIK Nauka

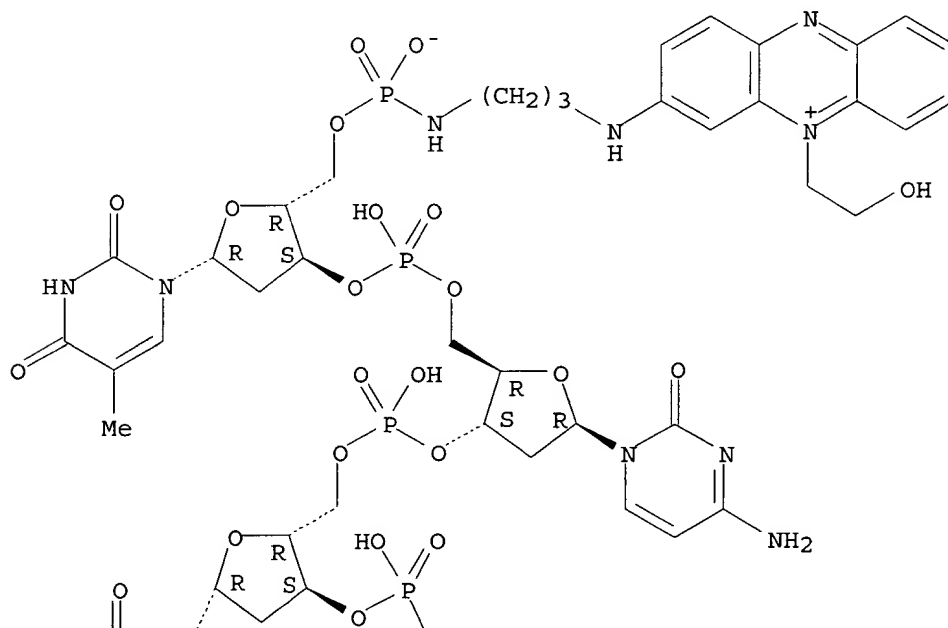
ED Entered STN: 24 Jan 1998

IT 177079-71-9 204335-58-0

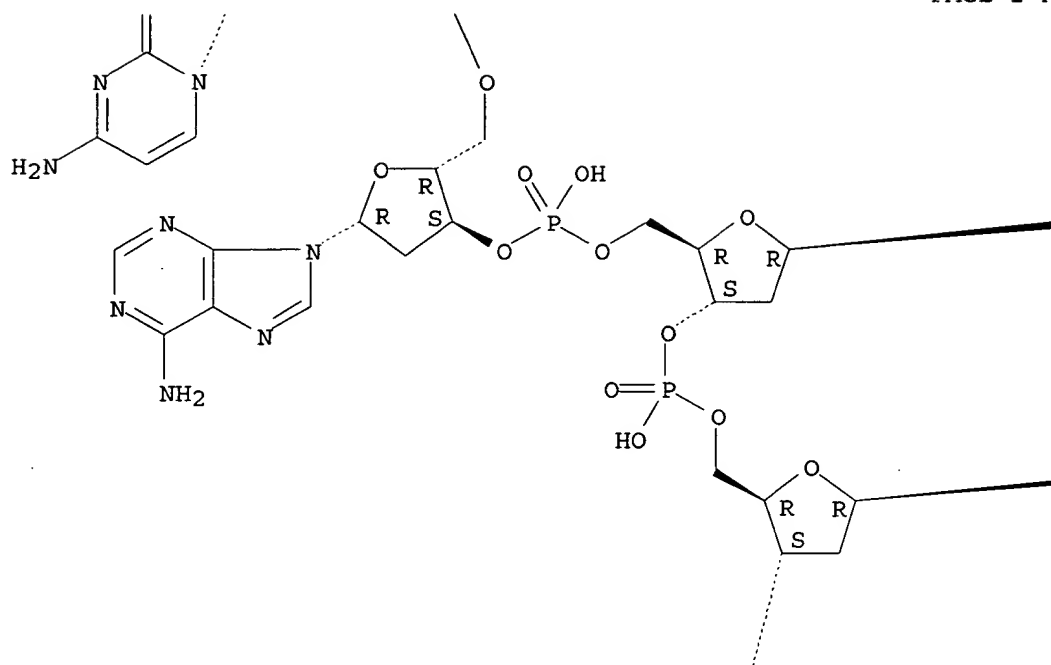
RN 177079-71-9 CAPLUS

Absolute stereochemistry.

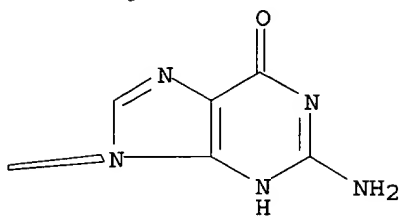
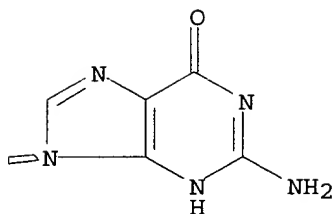
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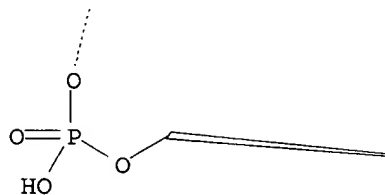
PAGE 2-A



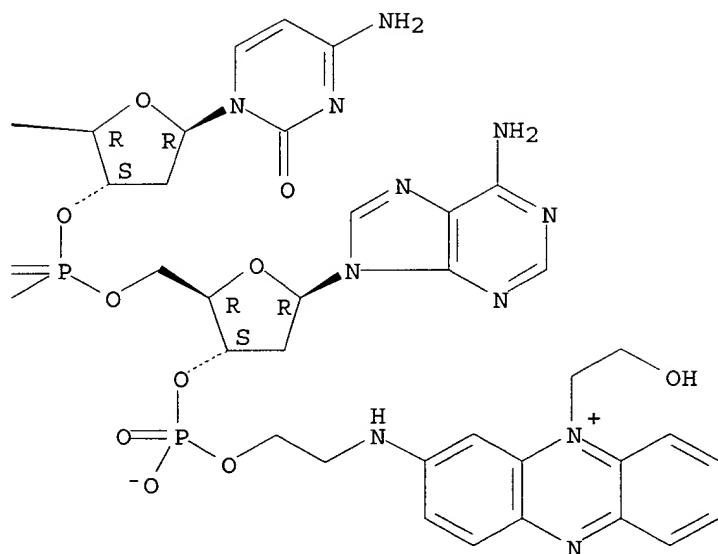
PAGE 2-B



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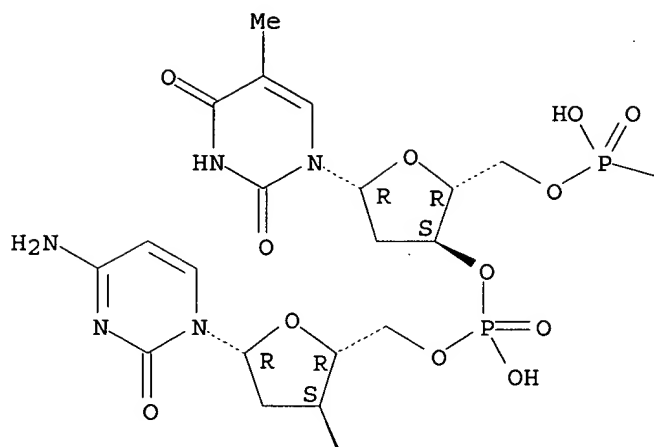
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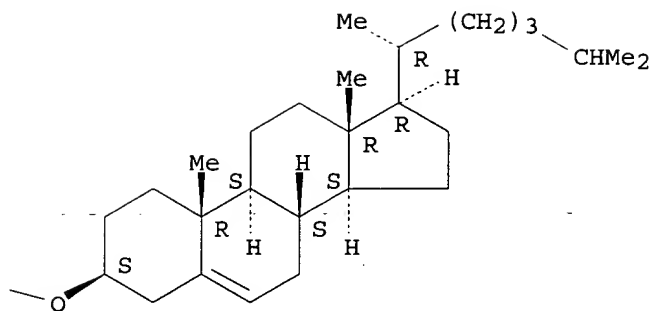
RN 204335-58-0 CAPLUS
 CN 3'-Adenylic acid, 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-, 3'-[2-[[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

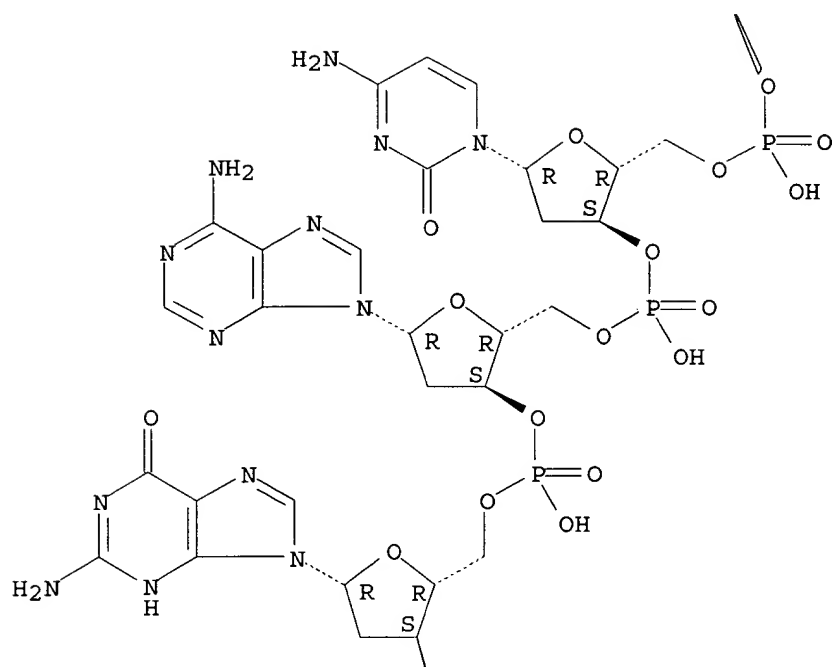
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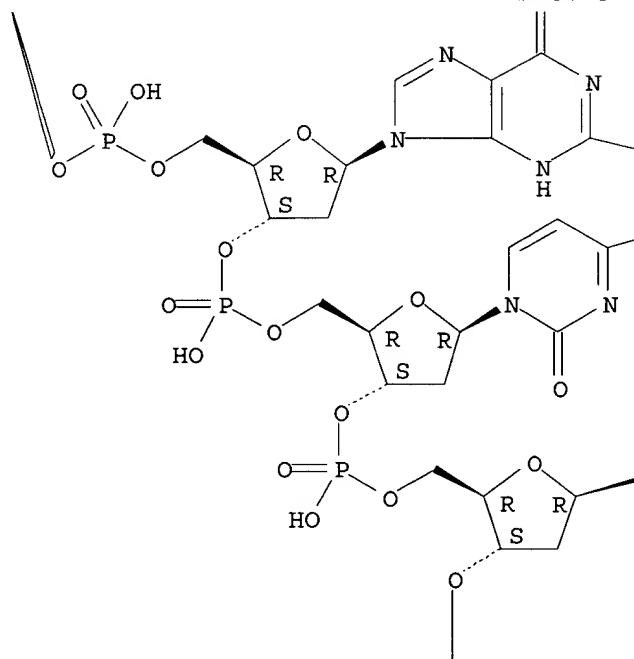
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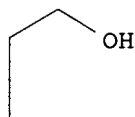
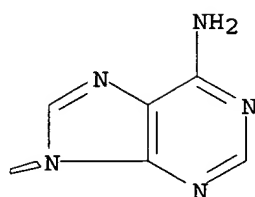
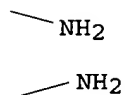
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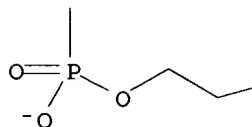
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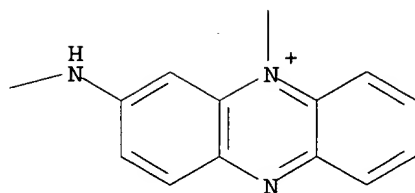
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IT 204711-82-0P 204712-02-7P 204712-08-3P
 204712-30-1P 204712-84-5P 204803-23-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (interaction of short oligonucleotide derivs. with nucleic acids)
 RN 204711-82-0 CAPLUS
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 phosphate), complex with 5'-O-[[[2-[(4-azido-2,3,5,6-
 tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyguanosine and 3'-[2-[[10-(2-

hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate bis(inner salt) (1:1:1) (9CI) (CA INDEX NAME)

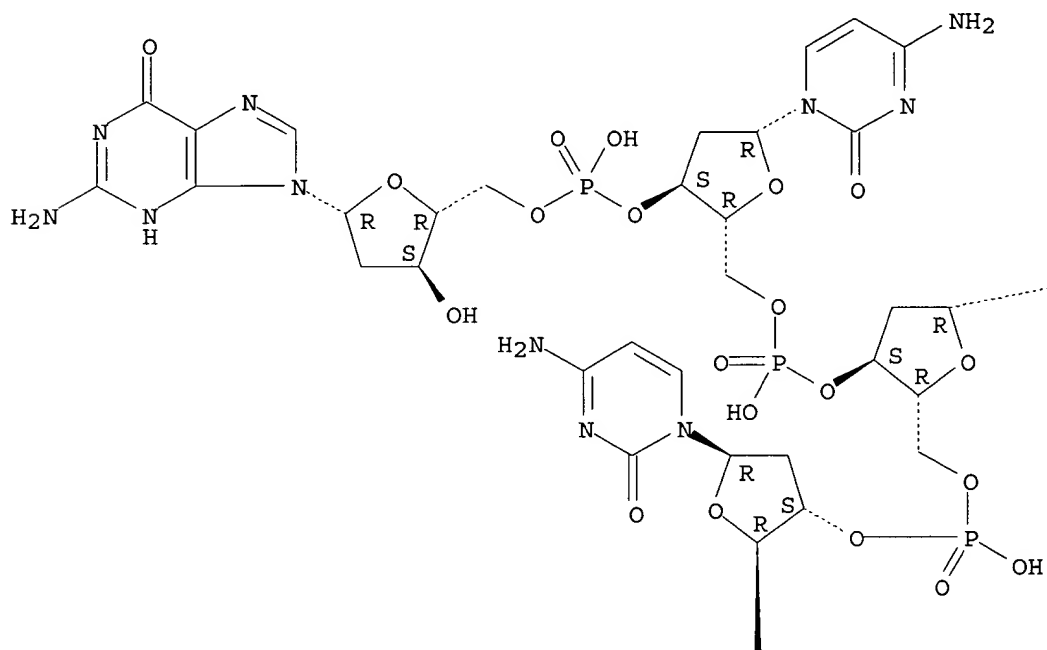
CM 1

CRN 204335-56-8

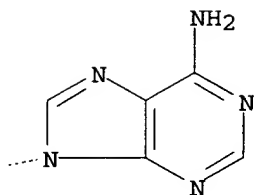
CMF C47 H55 F4 N21 O24 P4

Absolute stereochemistry.

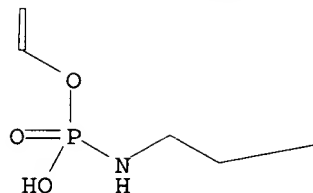
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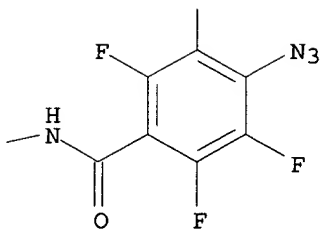
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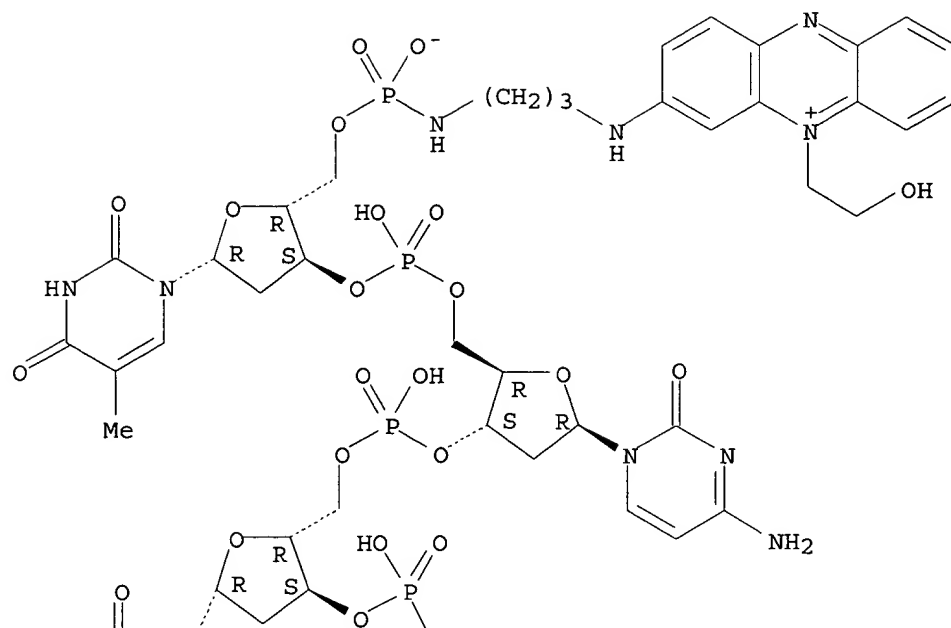
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CRN 177079-71-9

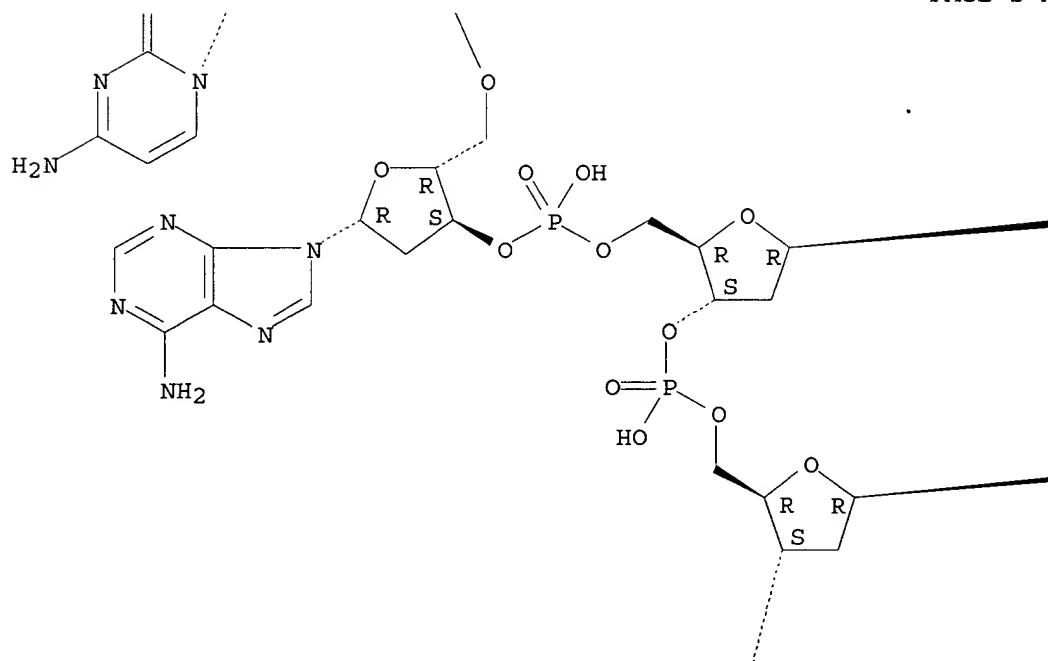
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

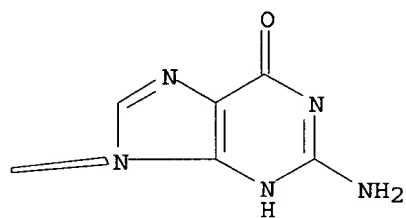
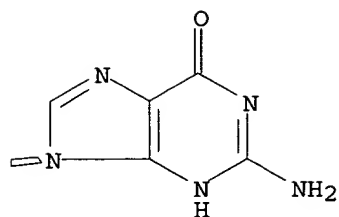
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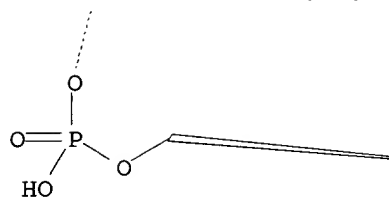
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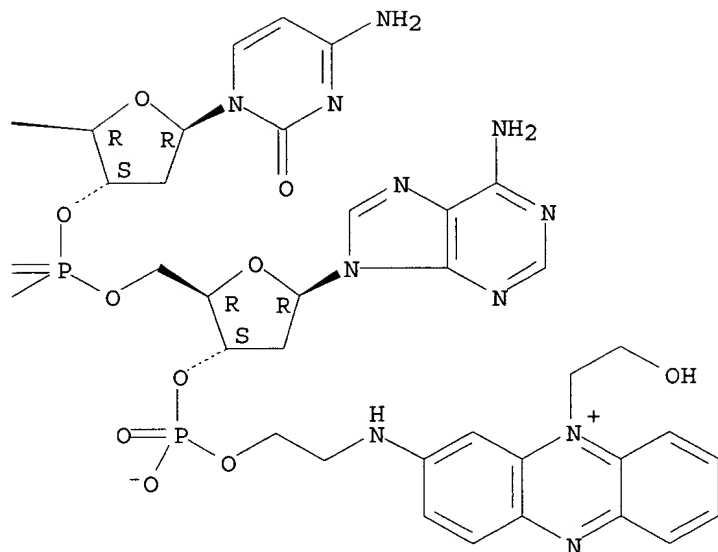
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CM 3

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 204712-02-7 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[2-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanosine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate inner salt and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate inner salt (1:1:1:1) (9CI) (CA INDEX NAME)

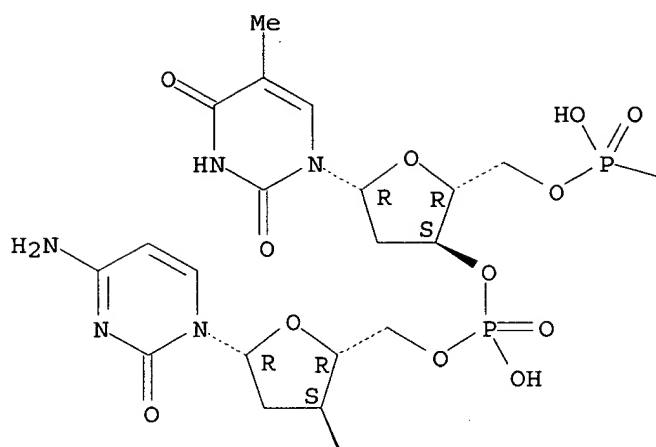
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CRN 204335-58-0

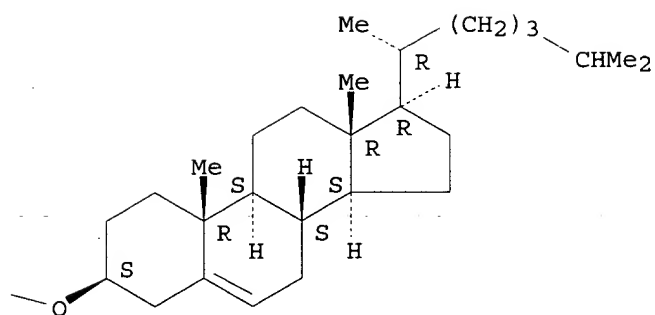
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

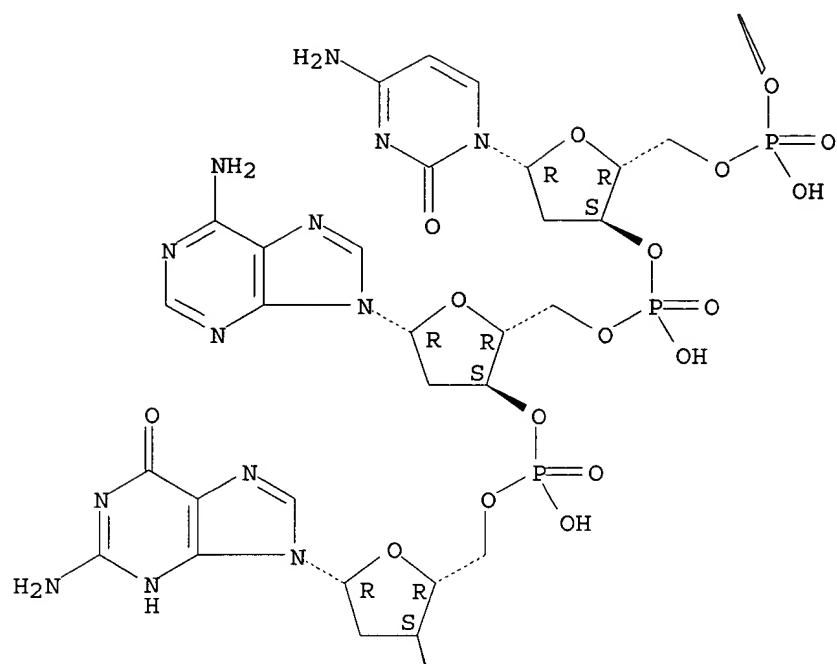
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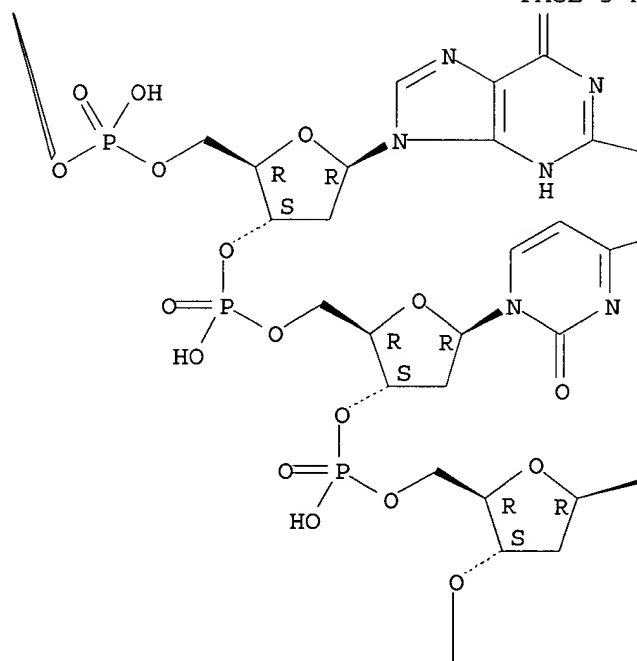
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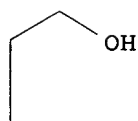
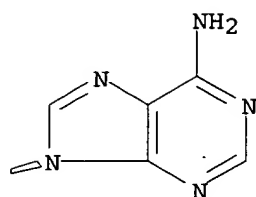
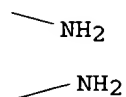
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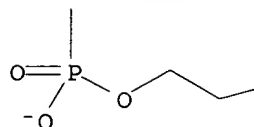
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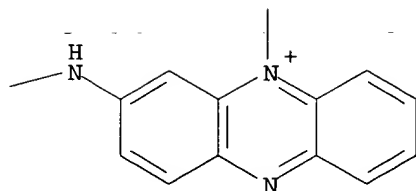
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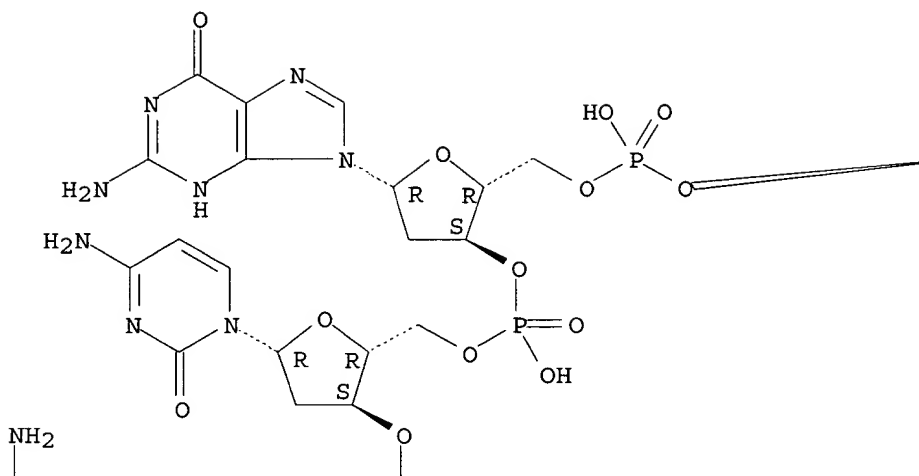
CM 2

CRN 204335-57-9

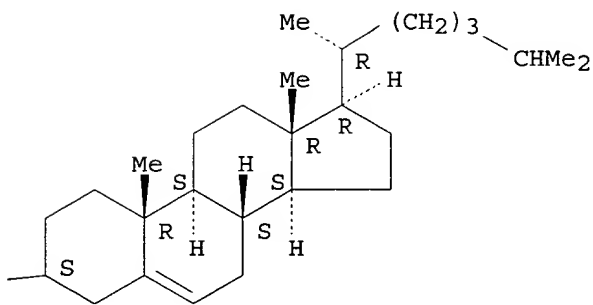
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

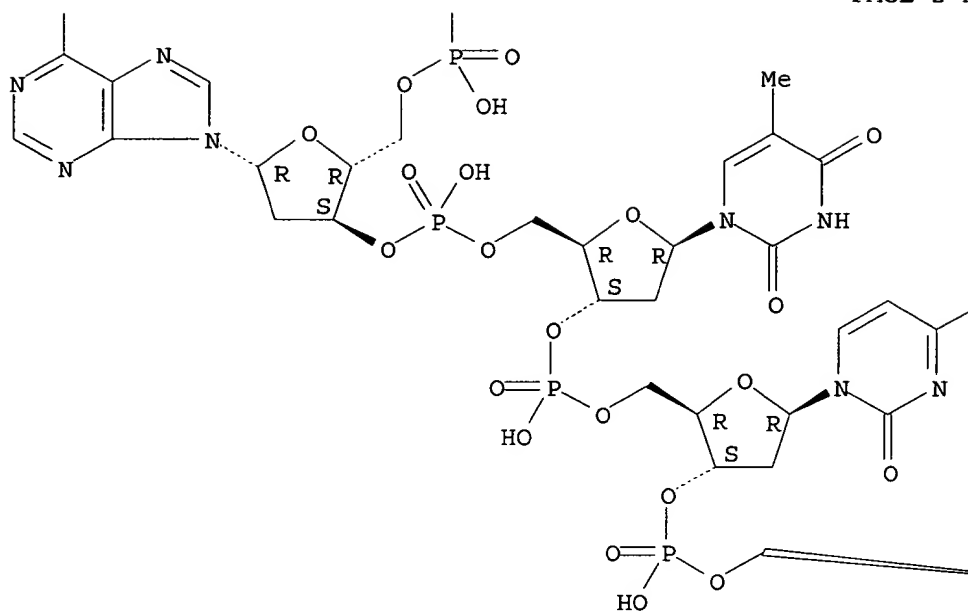
PAGE 1-A



PAGE 1-B

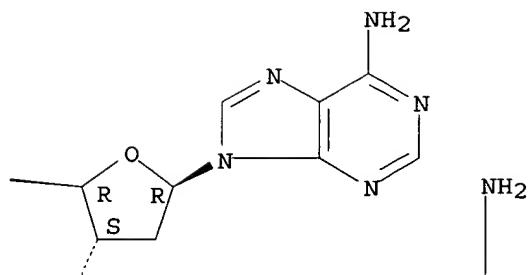


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PAGE 2-B

NH₂

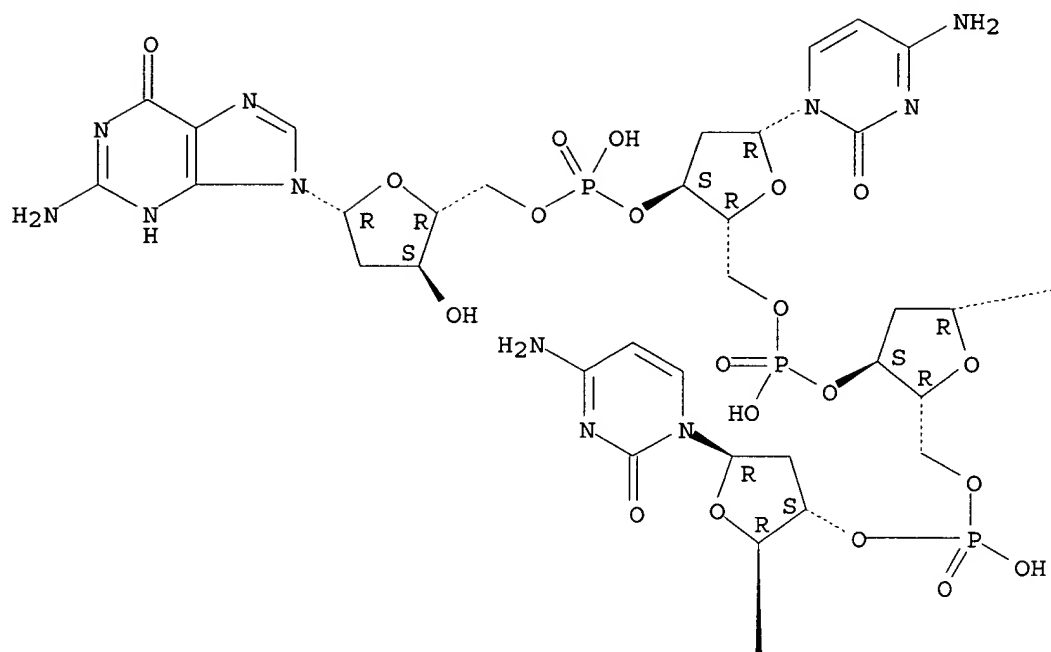


$$\begin{array}{c} \text{O} \\ \parallel \\ \text{HO} \end{array}$$

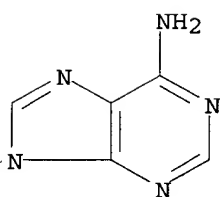
CRN 204335-56-8
CMF C47 H55 F4 N21 O24 P4

Absolute stereochemistry.

PAGE 1-A

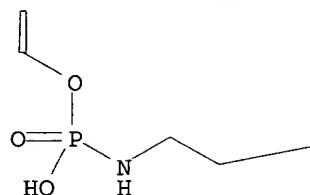


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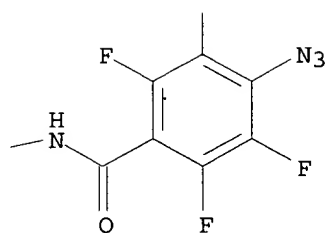


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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 204712-08-3 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3β)-cholest-5-en-3-yl]oxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylate inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[2-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-guanylate (1:1:1) (9CI) (CA INDEX NAME)

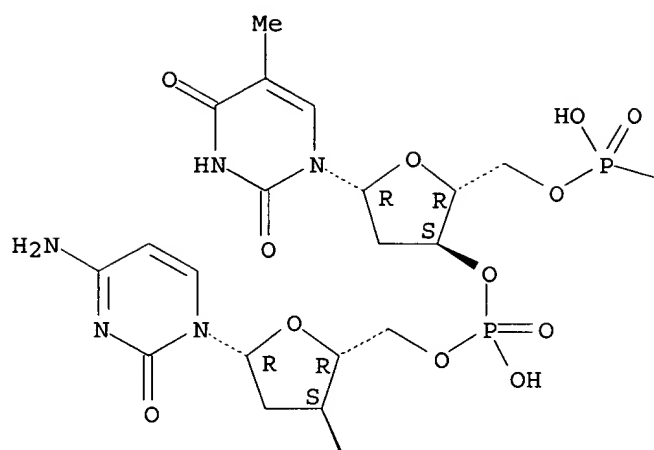
CM 1

CRN 204335-58-0

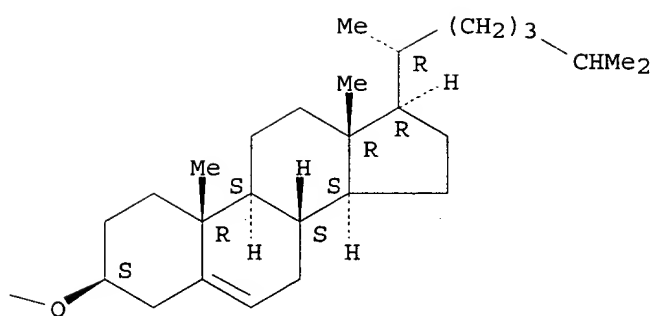
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

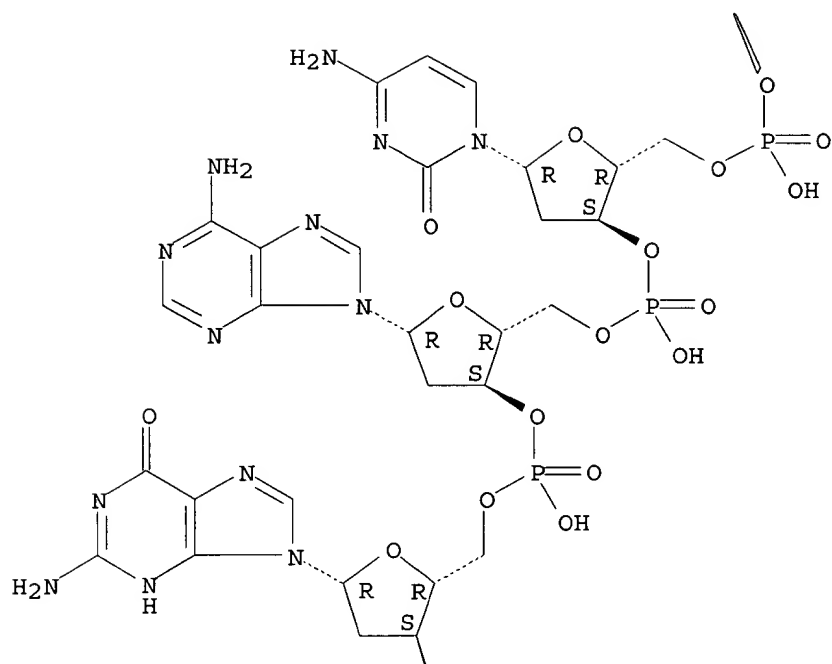
PAGE 1-A



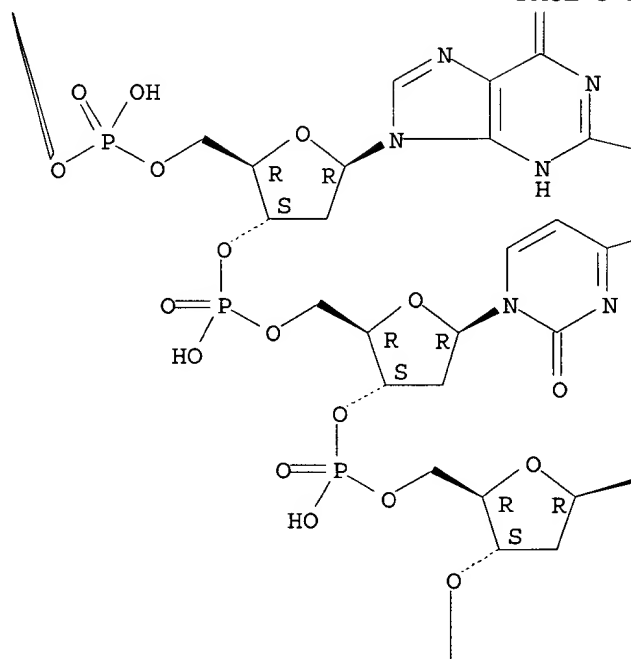
PAGE 1-B



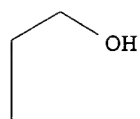
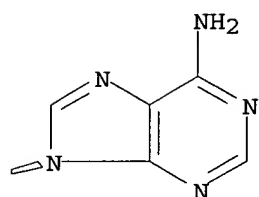
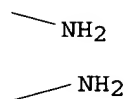
PAGE 2-A



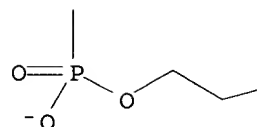
PAGE 3-A



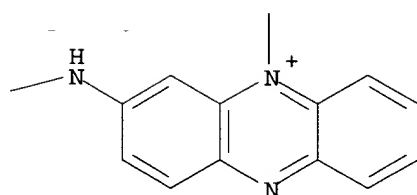
PAGE 3-B



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PAGE 4-B



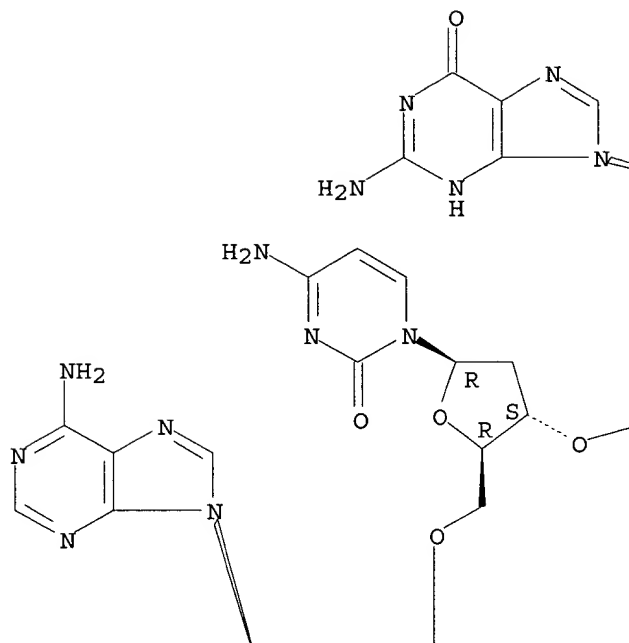
CM 2

CRN 204335-55-7

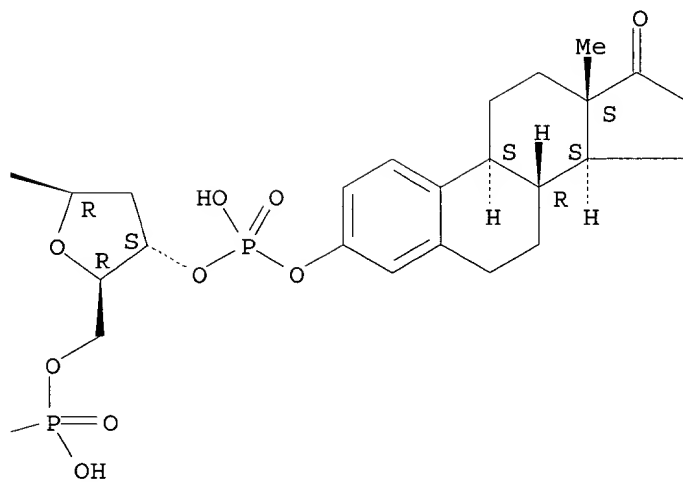
CMF C65 H76 F4 N21 O28 P5

Absolute stereochemistry.

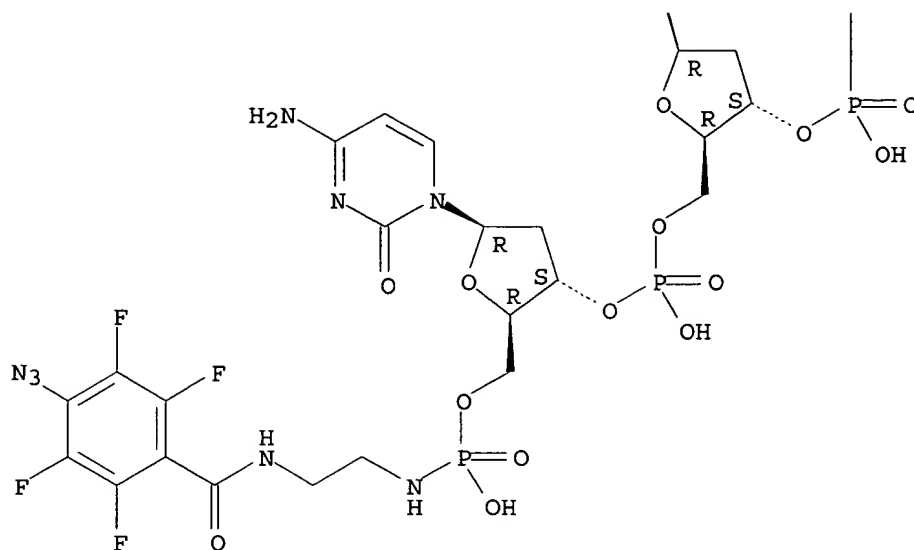
PAGE 1-A



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CM 3

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 204712-30-1 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3 β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-thymidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxy-3'-guanylate inner salt, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[[[(3 β)-cholest-5-en-3-yloxy]hydroxyphosphinyl]thymidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxy-3'-adenylylate inner salt and 3'-(17-oxoestra-1,3,5(10)-trien-3-yl) 5'-O-[[[2-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxy-3'-guanylate (1:1:1:1) (9CI) (CA INDEX NAME)

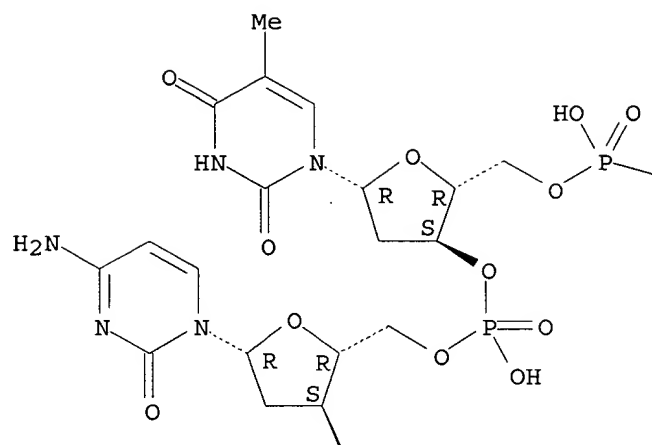
CM 1

CRN 204335-58-0

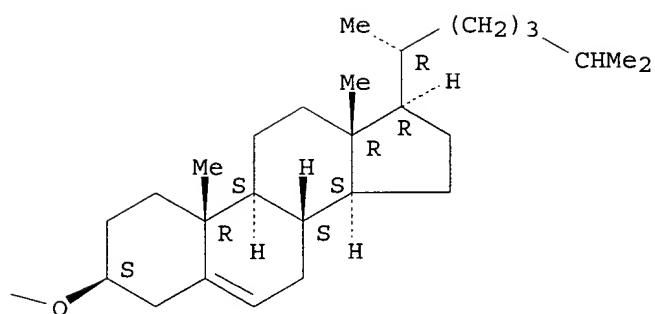
CMF C120 H159 N34 O52 P9

Absolute stereochemistry.

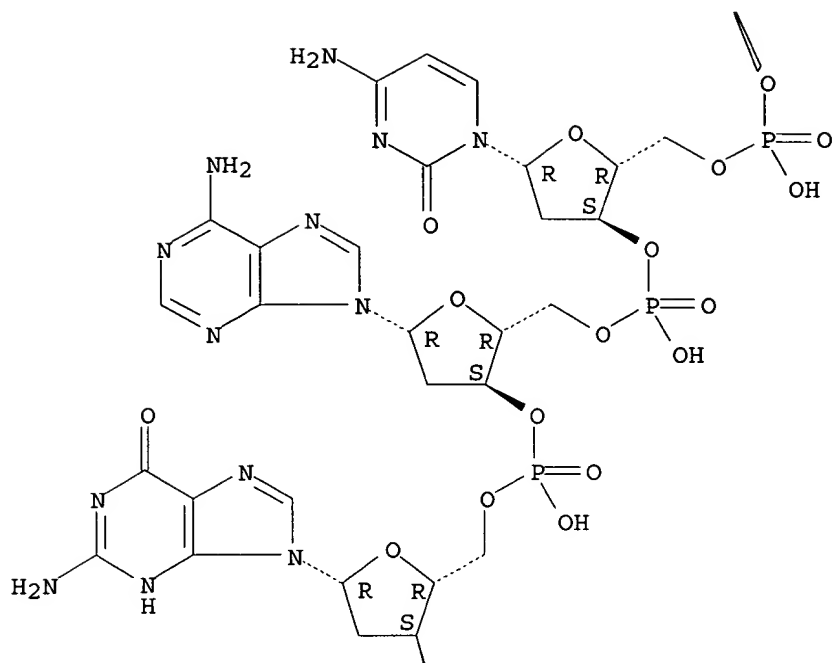
PAGE 1-A



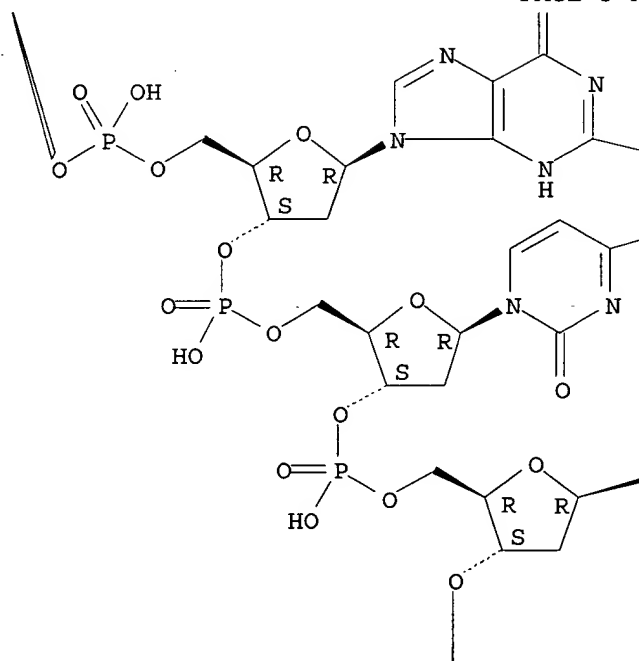
PAGE 1-B



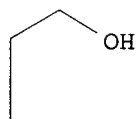
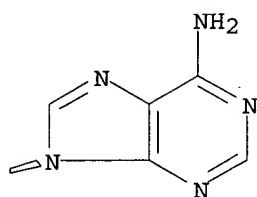
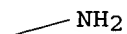
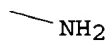
PAGE 2-A



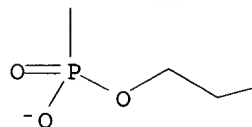
PAGE 3-A



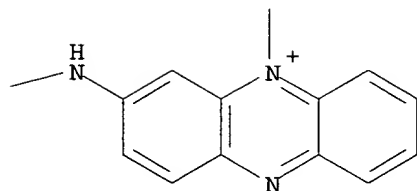
PAGE 3-B



PAGE 4-A



PAGE 4-B



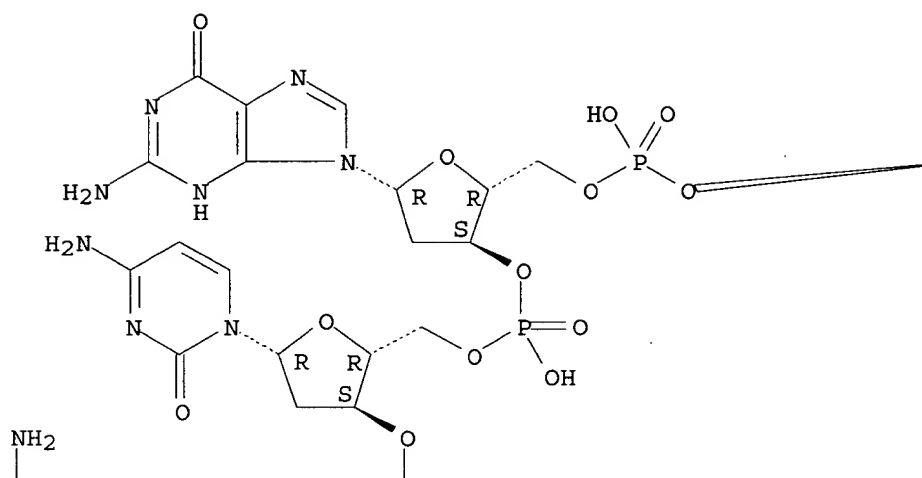
CM 2

CRN 204335-57-9

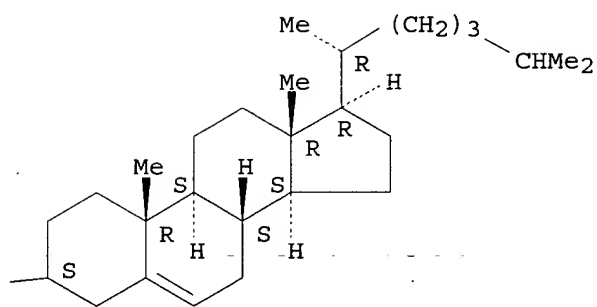
CMF C121 H159 N36 O51 P9

Absolute stereochemistry.

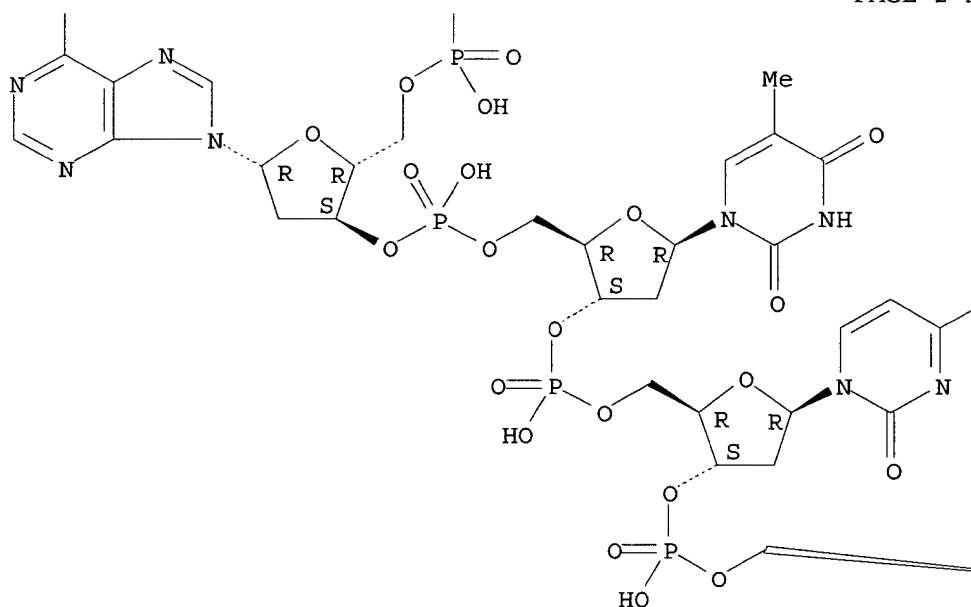
PAGE 1-A



PAGE 1-B

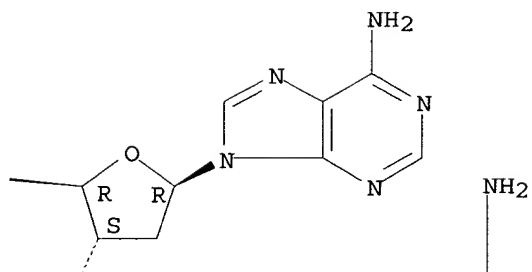


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PAGE 2-B

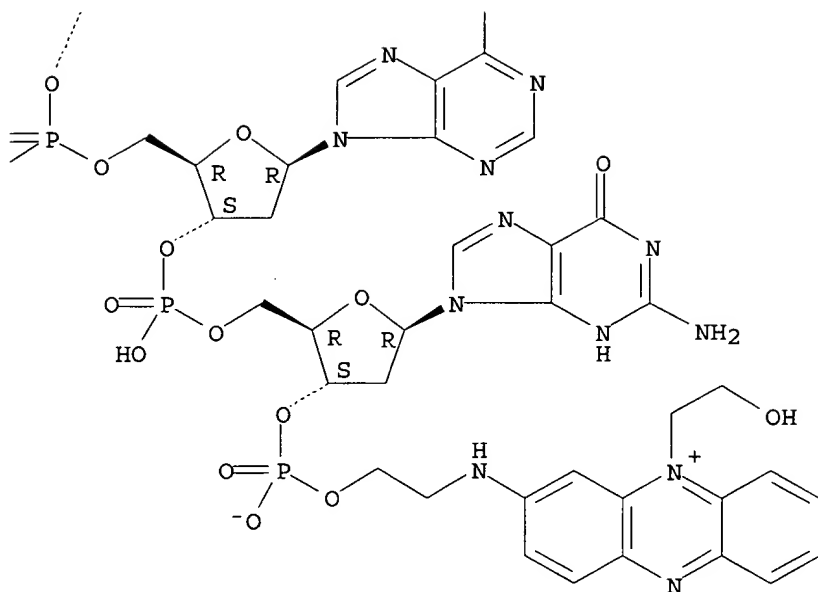
NH₂



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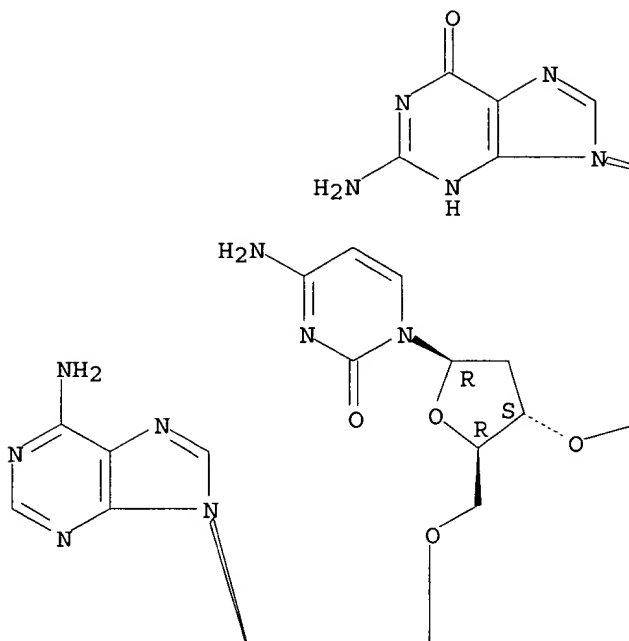
CM 3

CRN 204335-55-7

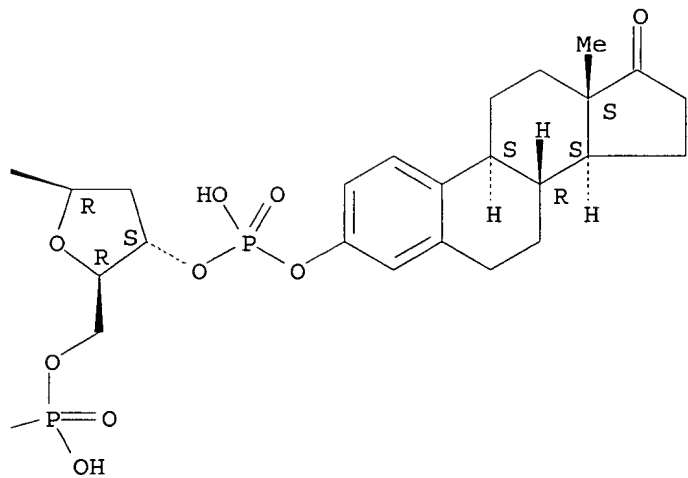
CMF C65 H76 F4 N21 O28 P5

Absolute stereochemistry.

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The chemical structure is a complex molecule featuring a 2,4,6-trifluoro-3-azidobenzoyl group, a 4-aminopyridine ring, and two ribose sugar units linked by phosphate groups. The structure includes stereochemical indicators (R, S) and labels for various atoms (N, O, P, F, H, C).

The molecule consists of the following components:

- 2,4,6-Trifluoro-3-azidobenzoyl group:** A benzene ring substituted with three fluorine (F) atoms at positions 2, 4, and 6, and an azido group (N₃) at position 3. It is attached to a carbonyl group (C=O) via an amide bond.
- 4-Aminopyridine ring:** A pyridine ring with an amino group (H₂N) at position 4, connected to a ribose sugar unit.
- Ribose sugar units:** Two ribose rings are shown, each with stereochemical labels (R, S) indicating the configuration of the substituents. They are linked by phosphate groups (P=O, OH).
- Phosphate groups:** Two phosphate groups are present, each with a central phosphorus atom (P) double-bonded to an oxygen (O) and single-bonded to two hydroxyl groups (OH). They are connected to the ribose rings via oxygen atoms (O).

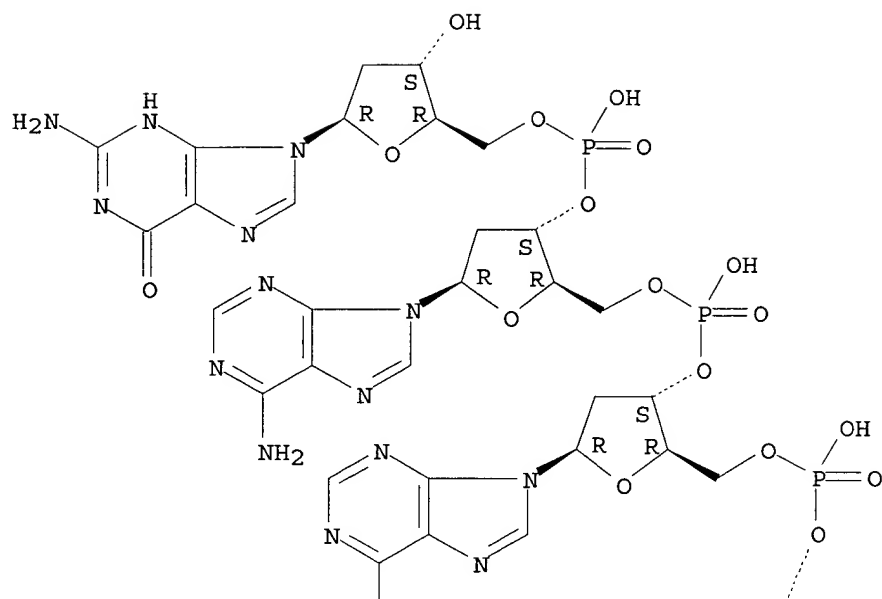
CRN 150227-65-9
CMF Unspecified
CCI MAN

RN 204712-84-5 CAPLUS
 CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen
 phosphate), complex with 5'-O-[[2-[(4-azido-2,3,5,6-
 tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyguanosine, 2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-
 hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanosine inner salt and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-
 yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-
 adenylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

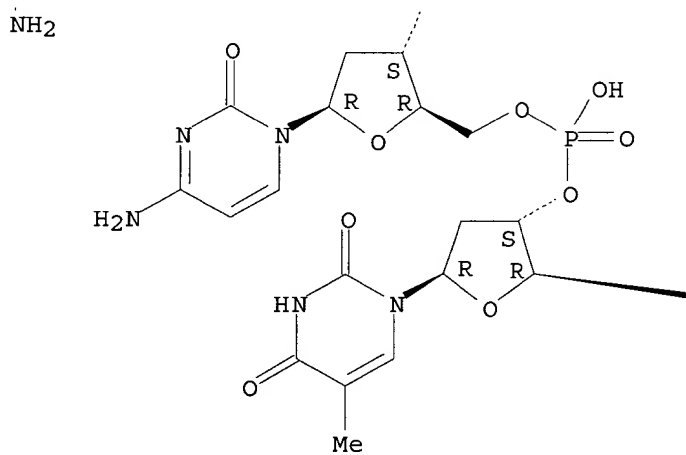
CRN 204335-59-1
CMF C95 H117 N37 O47 P8

Searched by Barb O'Bryen, STIC 2-2518

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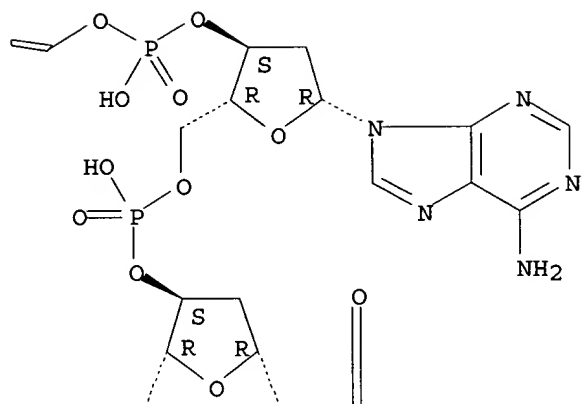


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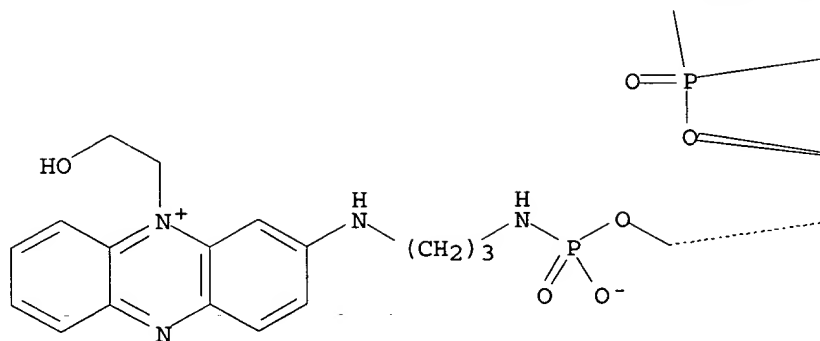


HO

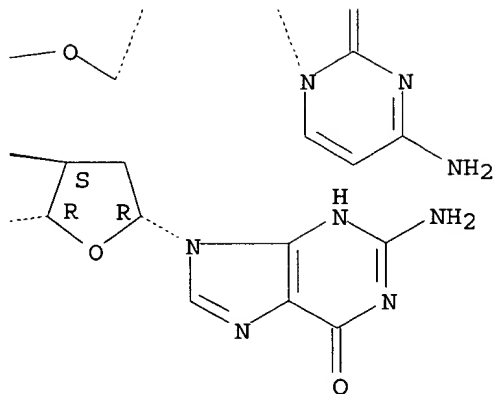
PAGE 2-B



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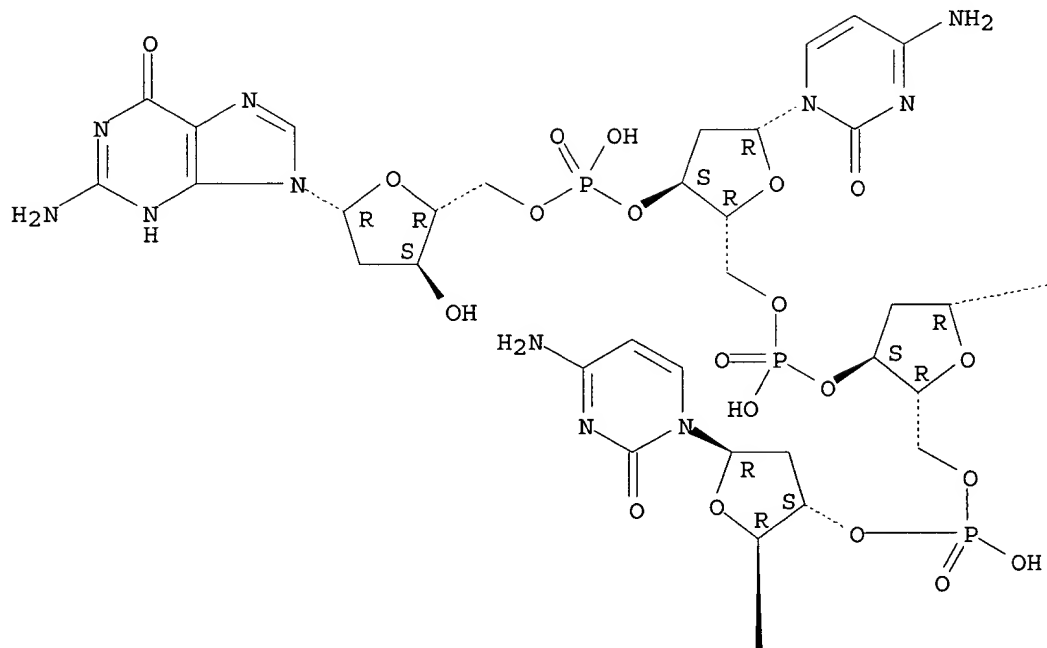
CM 2

CRN 204335-56-8

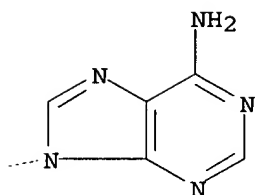
CMF C47 H55 F4 N21 O24 P4

Absolute stereochemistry.

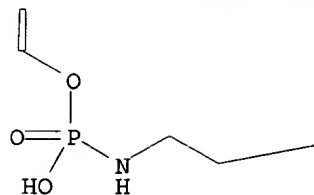
PAGE 1-A



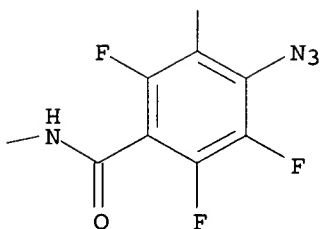
PAGE 1-B



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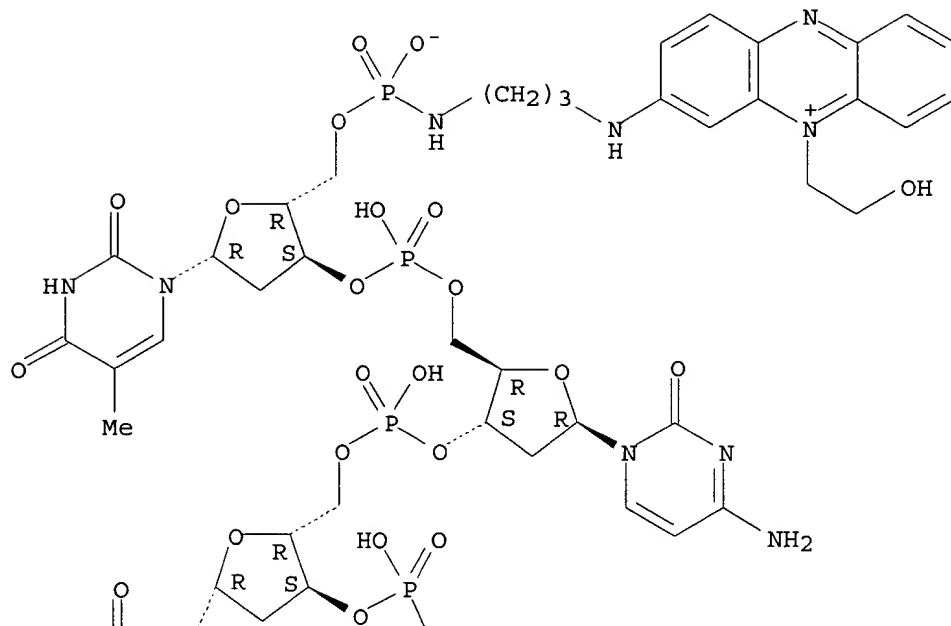
CM 3

CRN 177079-71-9

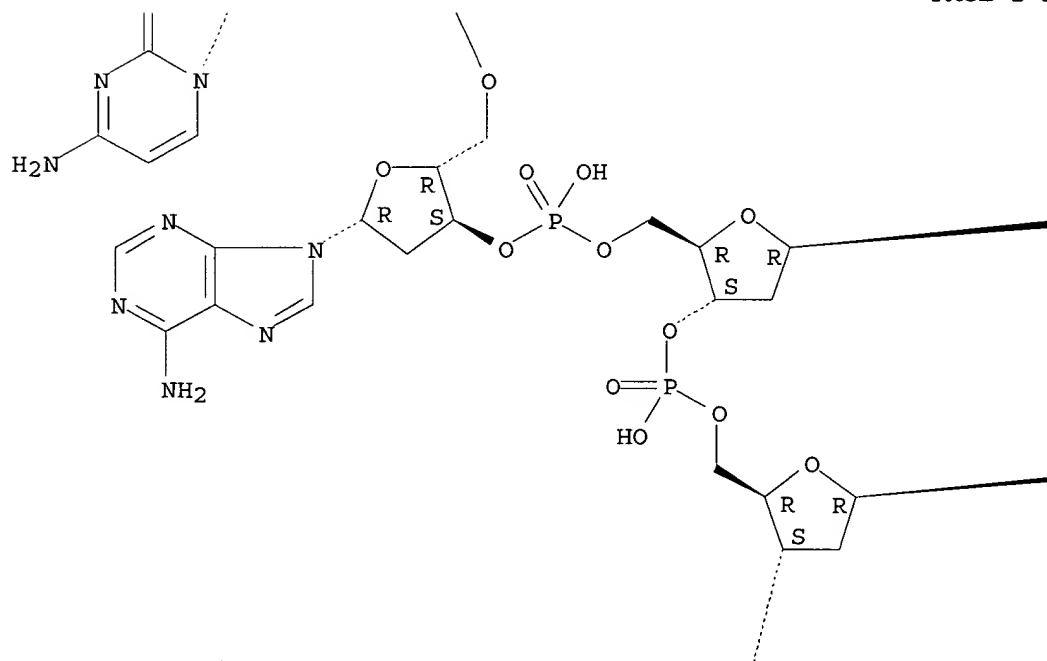
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

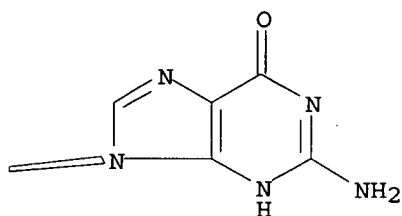
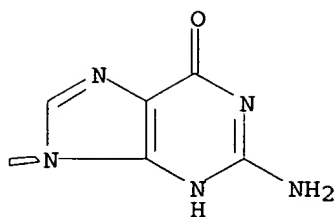
PAGE 1-A



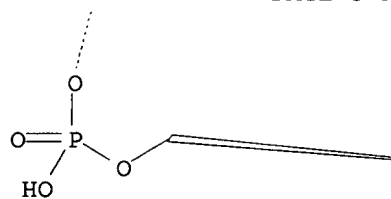
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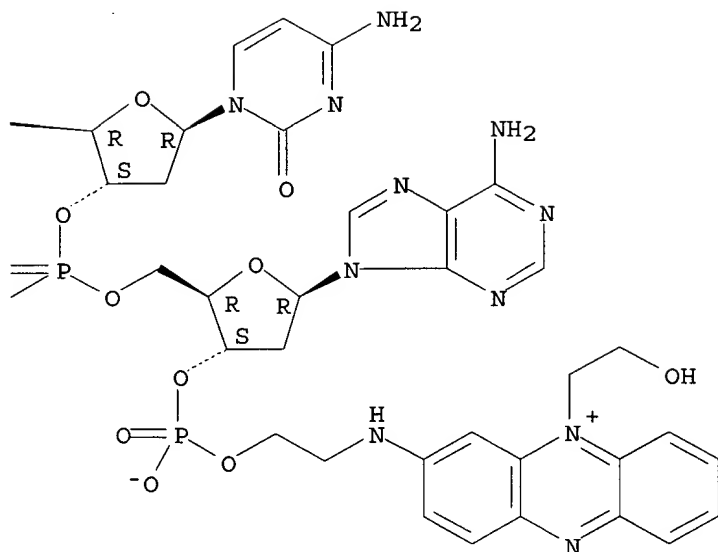
PAGE 2-B



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CM 4

CRN 150227-65-9

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 204803-23-6 CAPLUS

CN DNA, d(T-G-C-C-T-G-G-A-G-C-T-G-C-T-T-G-A-T-G-C), 5'-(dihydrogen phosphate), complex with 5'-O-[[[2-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]ethyl]amino]hydroxyphosphinyl]-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanosine, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 2'-deoxy-5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]guanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-3'-guanylate bis(inner salt) and 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] 5'-O-[hydroxy[[3-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]propyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-3'-adenylylate bis(inner salt) (1:1:1:1) (9CI) (CA INDEX NAME)

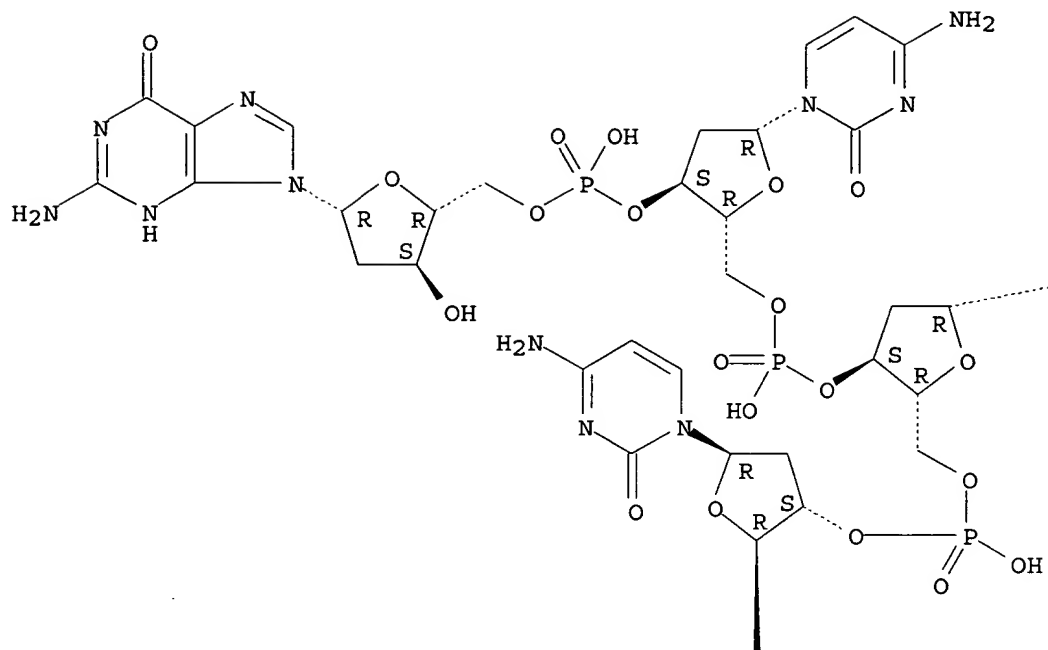
CM 1

CRN 204335-56-8

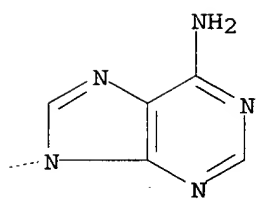
CMF C47 H55 F4 N21 O24 P4

Absolute stereochemistry.

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F

CCCCN(P(=O)(O)OC(=O)C)C(=O)ON#Cc1cc(F)c(NC(=O)O)c(F)c1F

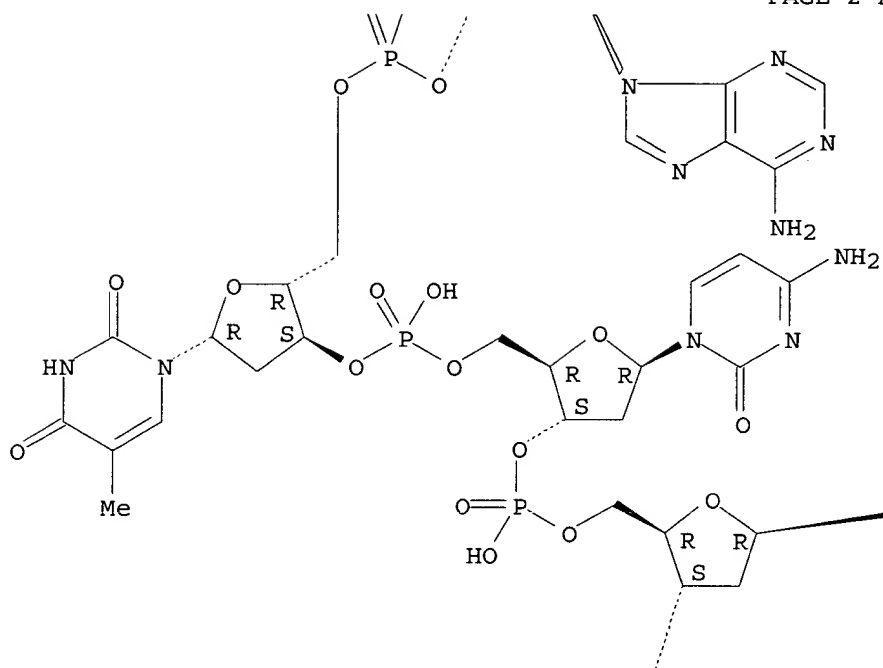
CRN 177079-72-0
CMF C111 H133 N40 O51 P9

Absolute stereochemistry.

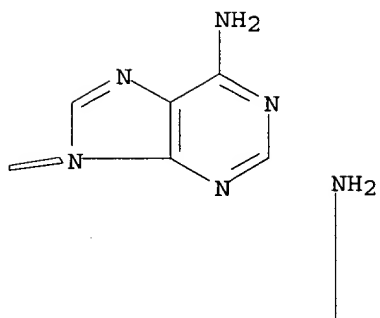
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NH₂

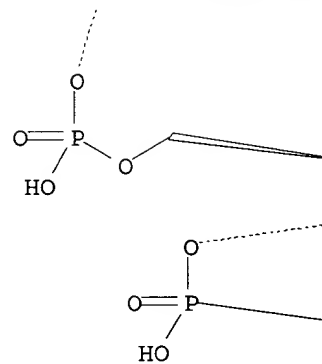
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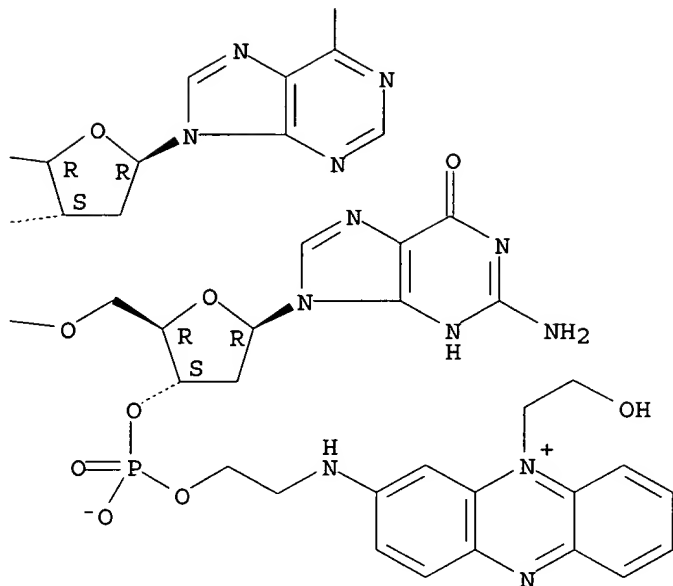
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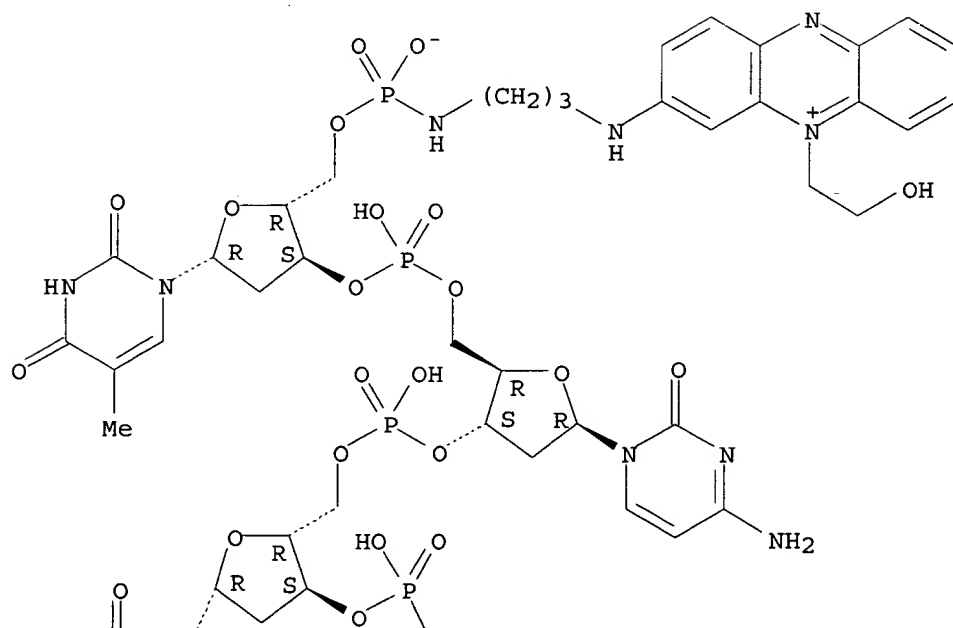
CM 3

CRN 177079-71-9

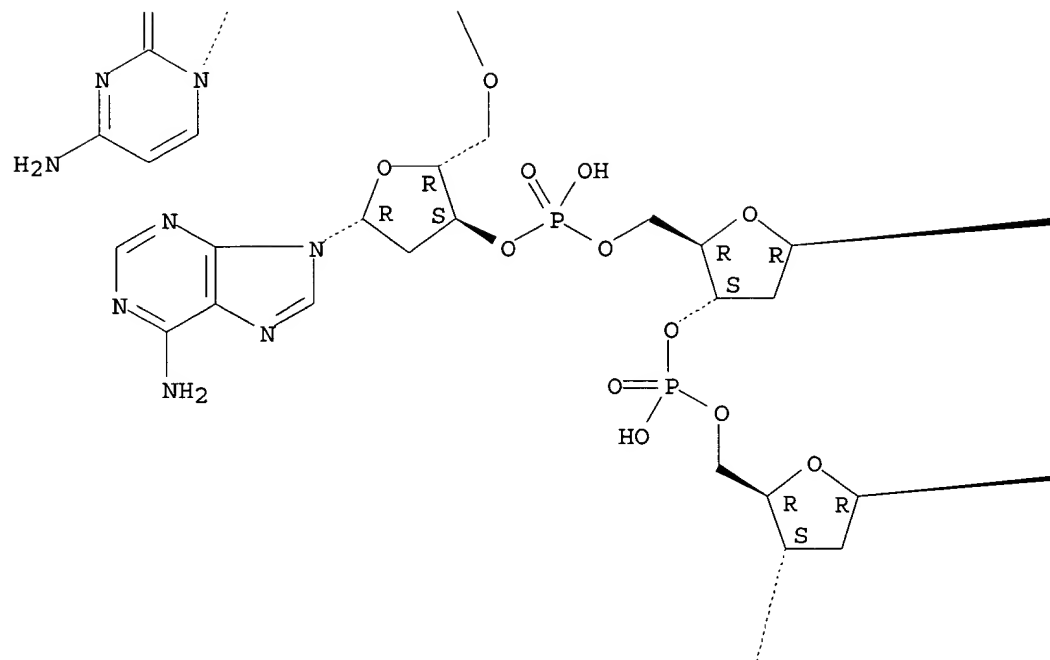
CMF C110 H133 N38 O52 P9

Absolute stereochemistry.

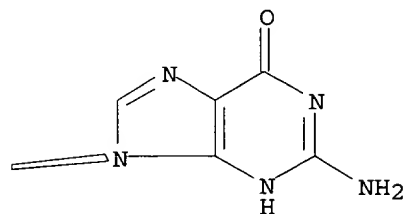
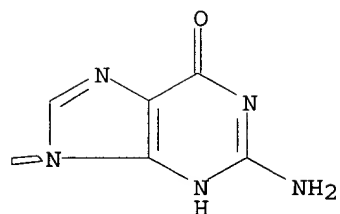
PAGE 1-A



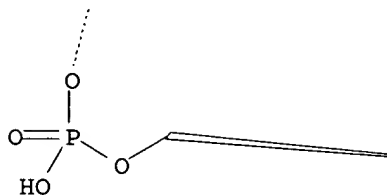
PAGE 2-A



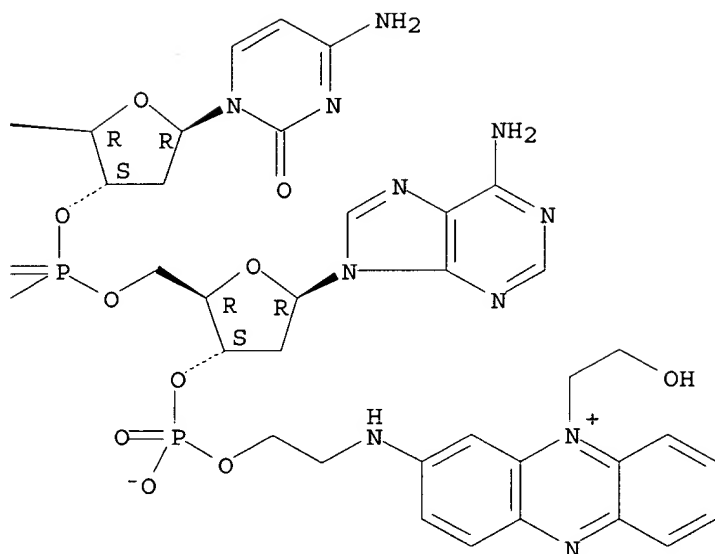
PAGE 2-B



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PAGE 3-B



CM 4

CRN 150227-65-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 15 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:168528 CAPLUS
DOCUMENT NUMBER: 126:153644
TITLE: Treatment of hemoglobinopathies by
third-strand-targeted mutagenesis or homologous
recombination method
INVENTOR(S): Glazer, Peter M.
PATENT ASSIGNEE(S): Yale University, USA

Searched by Barb O'Bryen, STIC 2-2518

SOURCE: PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9640271 | A1 | 19961219 | WO 1996-US9430 | 19960606 |
| W: AU, BR, CA, CN, CZ, FI, HU, IL, JP, KP, KR, MX, NO, NZ, SG, SK, UA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9663286 | A1 | 19961230 | AU 1996-63286 | 19960606 |
| PRIORITY APPLN. INFO.: | | | US 1995-473845 | A 19950607 |
| | | | WO 1996-US9430 | W 19960606 |

ED Entered STN: 13 Mar 1997

AB The present invention relates to management and treatment of hemoglobinopathies, such as sickle cell anemia and β -thalassemia. The invention also relates to developing research animals and cell lines for the study of hemoglobinopathies and their therapies. The invention utilizes third strand oligonucleotides to target double-stranded nucleic acid sequences in or near the globin genes, or in or near sequences controlling expression of those genes to cause either a desired mutation (third-strand-targeted mutagenesis method) or nucleic acid damage to stimulate homologous recombination (third-strand-targeted homologous recombination method) with a supplied donor nucleic acid.

IT **186707-85-7P 186707-86-8P 186707-88-0P**

RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)

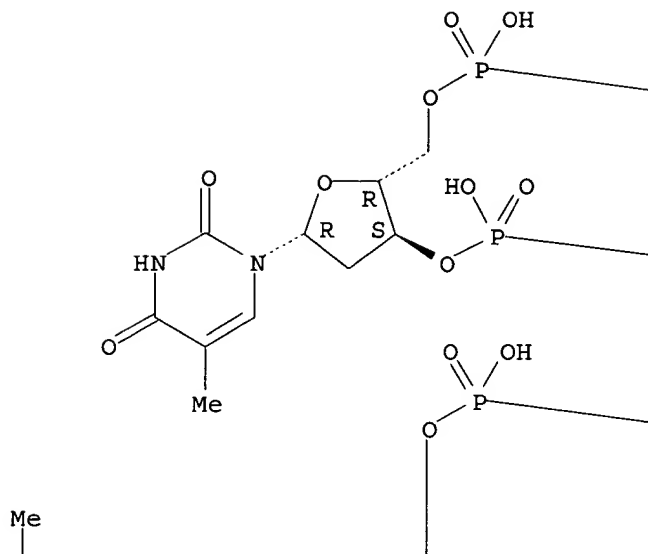
(nucleotide sequence of third-strand-oligonucleotide for targeting nature β -globin gene; treatment of hemoglobinopathies by third-strand-targeted mutagenesis or homologous recombination method)

RN 186707-85-7 CAPLUS

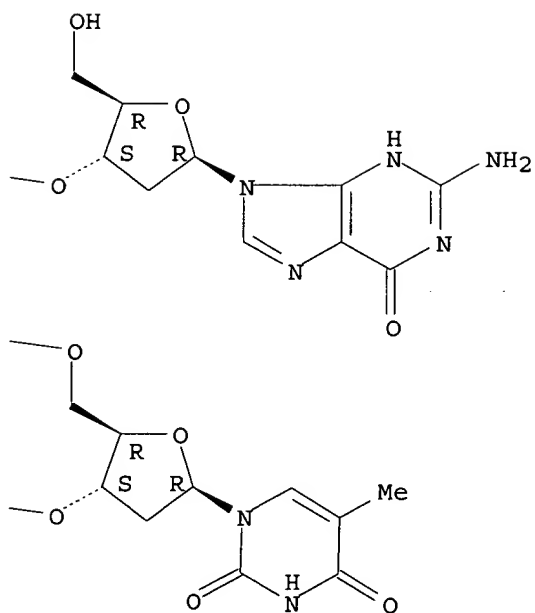
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Absolute stereochemistry.

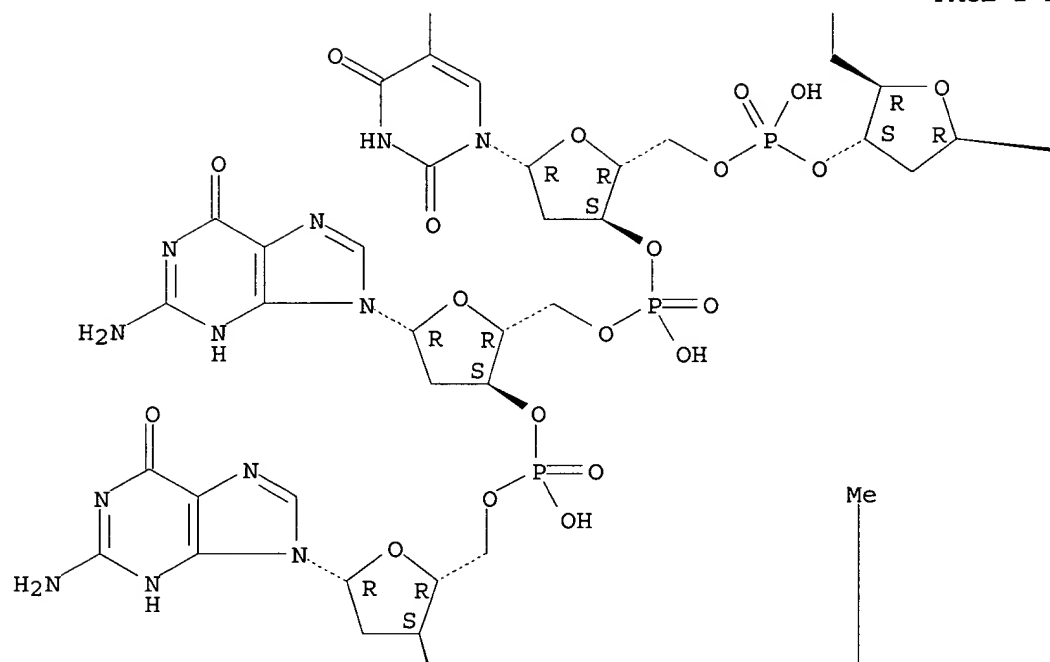
PAGE 1-A



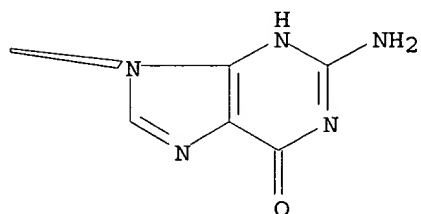
PAGE 1-B



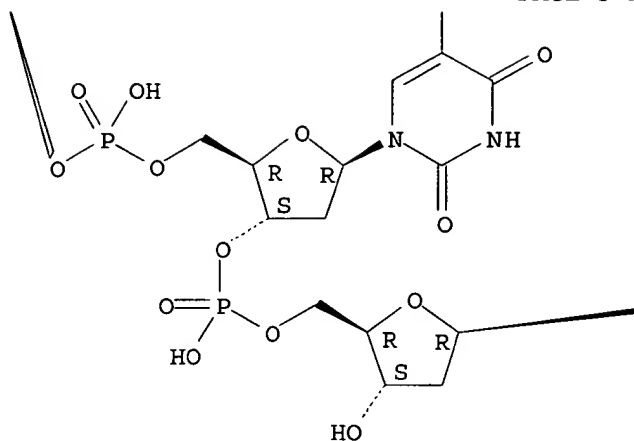
PAGE 2-A



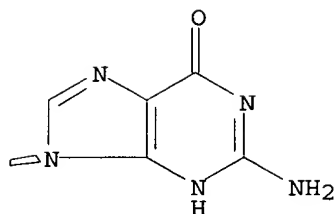
PAGE 2-B



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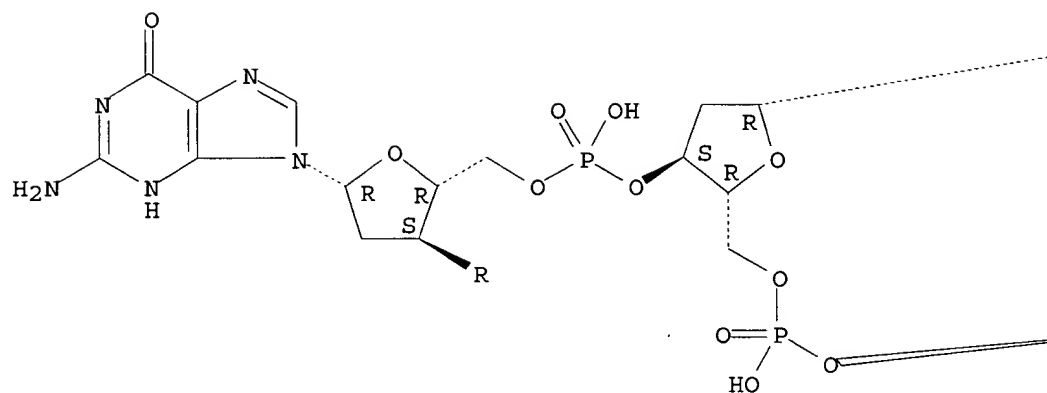


RN 186707-86-8 CAPLUS

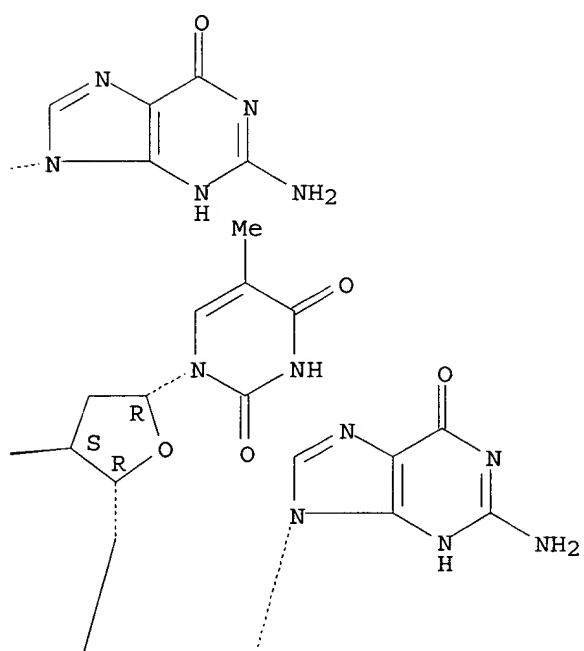
CN Guanosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-
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 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

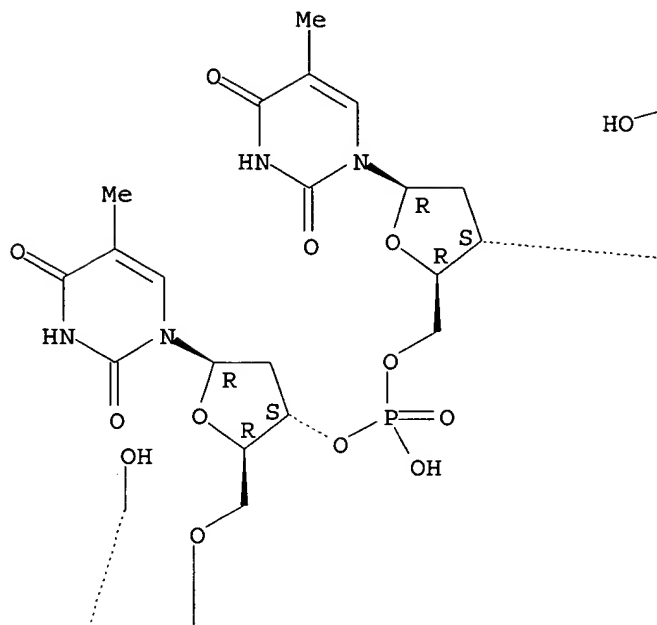
PAGE 1-A



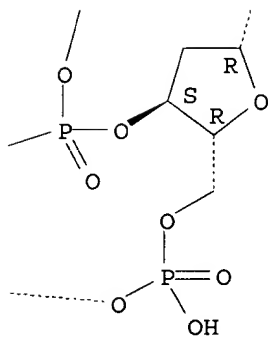
PAGE 1-B



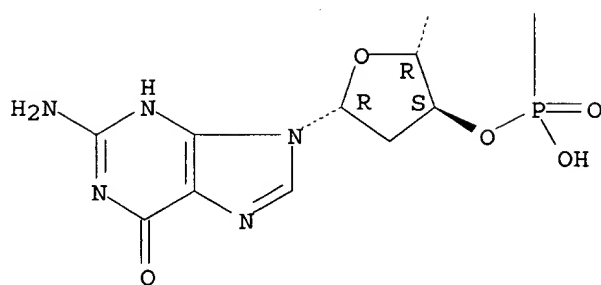
PAGE 2-A



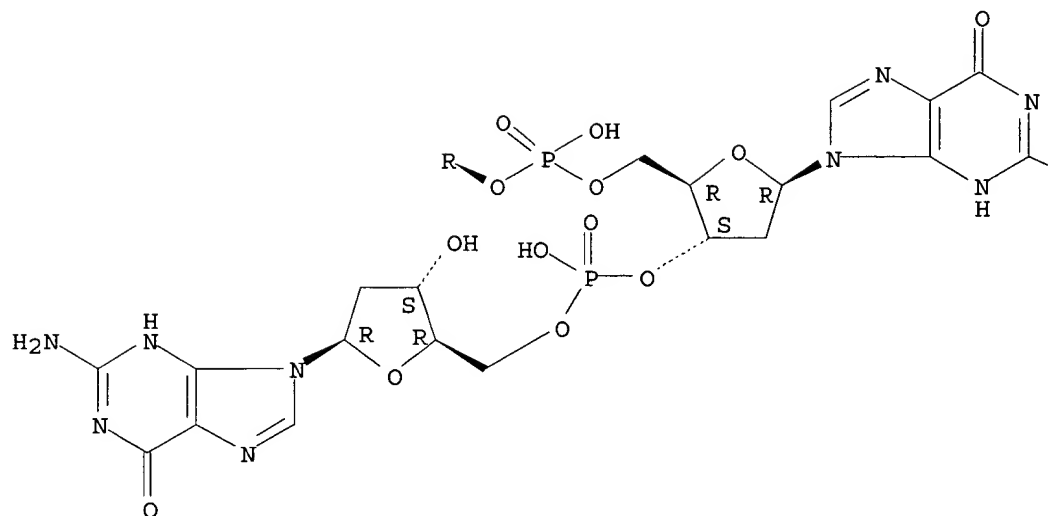
PAGE 2-B



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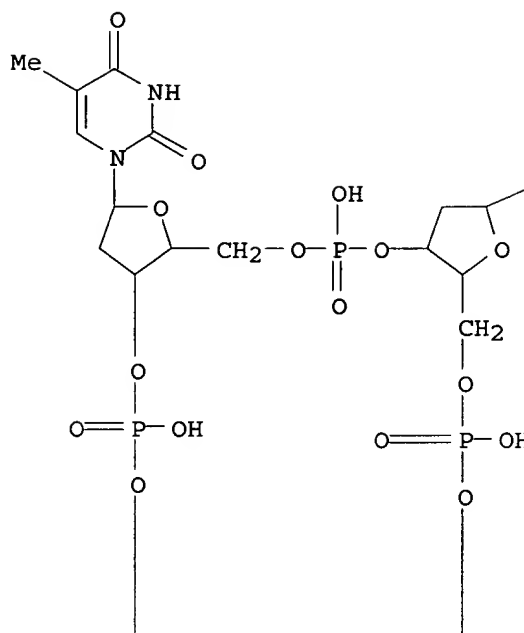


PAGE 4-B

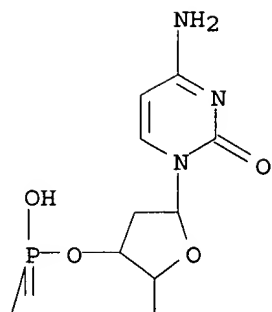
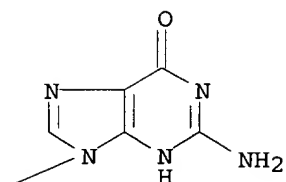
—NH₂

RN 186707-88-0 CAPLUS
 CN Guanosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

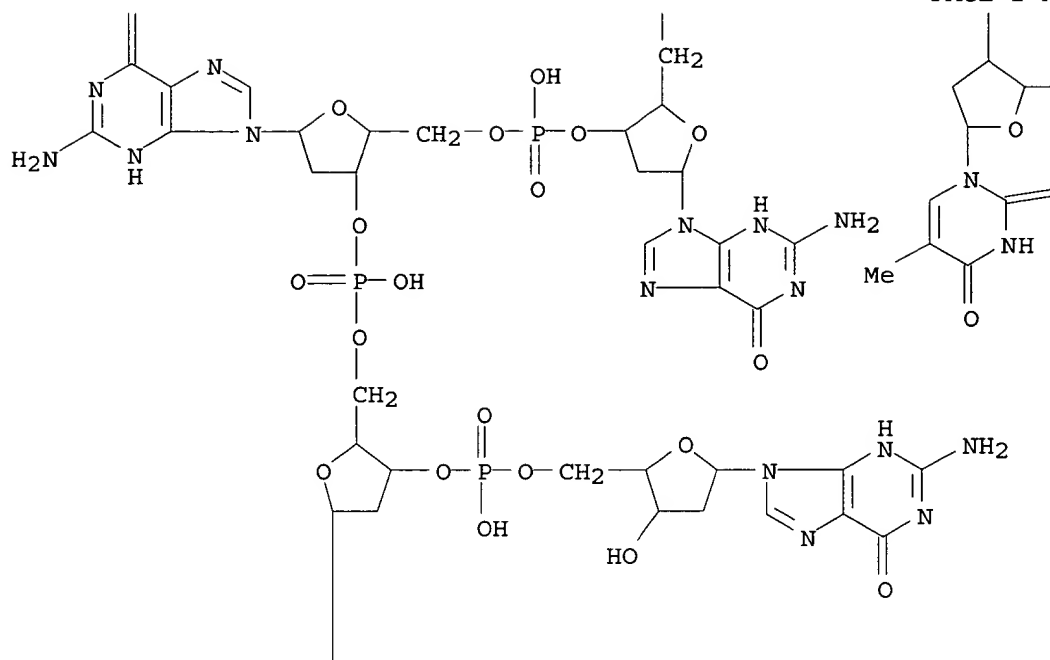
PAGE 1-A



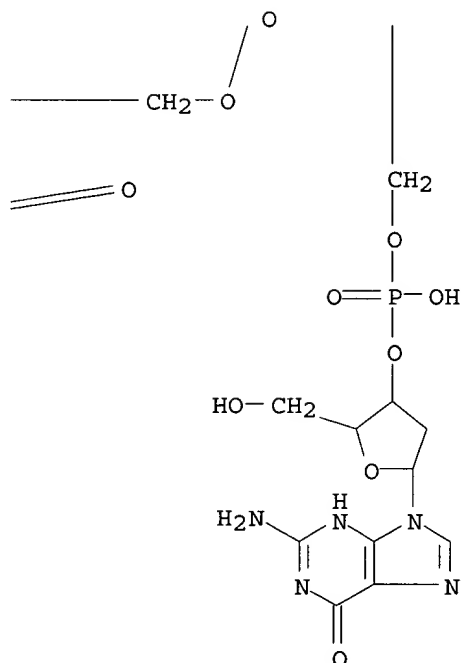
PAGE 1-B



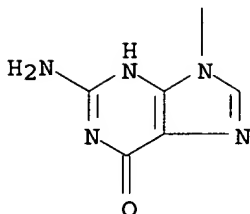
PAGE 2-A



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L46 ANSWER 16 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:124382 CAPLUS

DOCUMENT NUMBER: 126:126887

TITLE: Hepatitis C virus-complementary oligonucleotides and analogs and their use in prophylaxis, treatment and diagnosis of viral infection

INVENTOR(S): Frank, Bruce L.; Goodchild, John; Hamlin, Henry A., Jr.; Kilkuskie, Robert E.; Roberts, Noel A.; Roberts, Peter C.; Walther, Debra M.; Wolfe, Jia L.

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.; Hybridon Inc.

SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9639500 | A2 | 19961212 | WO 1996-EP2427 | 19960604 |
| WO 9639500 | A3 | 19970313 | | |
| W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| ZA 9604446 | A | 19961206 | ZA 1996-4446 | 19960530 |
| CA 2226438 | AA | 19961212 | CA 1996-2226438 | 19960604 |
| AU 9662219 | A1 | 19961224 | AU 1996-62219 | 19960604 |
| EP 833902 | A2 | 19980408 | EP 1996-920788 | 19960604 |
| EP 833902 | B1 | 20030514 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| AT 240392 | E | 20030515 | AT 1996-920788 | 19960604 |
| EP 1331267 | A2 | 20030730 | EP 2003-5364 | 19960604 |
| EP 1331267 | A3 | 20031203 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PT 833902 | T | 20030930 | PT 1996-920788 | 19960604 |
| ES 2196157 | T3 | 20031216 | ES 1996-920788 | 19960604 |
| PRIORITY APPLN. INFO.: | | | US 1995-471968 | A 19950606 |
| | | | EP 1996-920788 | A3 19960604 |
| | | | WO 1996-EP2427 | W 19960604 |

ED Entered STN: 24 Feb 1997

AB The present invention discloses synthetic oligonucleotides and oligonucleotide analogs complementary to contiguous and non-contiguous

regions of the hepatitis C virus (HCV) RNA. Also disclosed are methods and 'kits for inhibiting the replication of HCV, inhibiting the expression of HCV nucleic acid and protein, and for treating HCV infections. Numerous oligodeoxyribonucleotides, hybrid oligodeoxy- and deoxyribonucleotides, and analogs of these oligonucleotides containing modified linkages, modified bases, modified sugar residues, etc. were prepared. These oligonucleotides were tested in RNase H cleavage assays as well as in inhibition of HCV luciferase fusion protein expression in stably transfected cells, inhibition of HCV RNA expression in stably transfected cells, and inhibition of HCV protein expression in Semliki Forest virus/HCV recombinant virus infected cells. Sequence-specific inhibition was observed.

IT 185946-81-0P

RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)

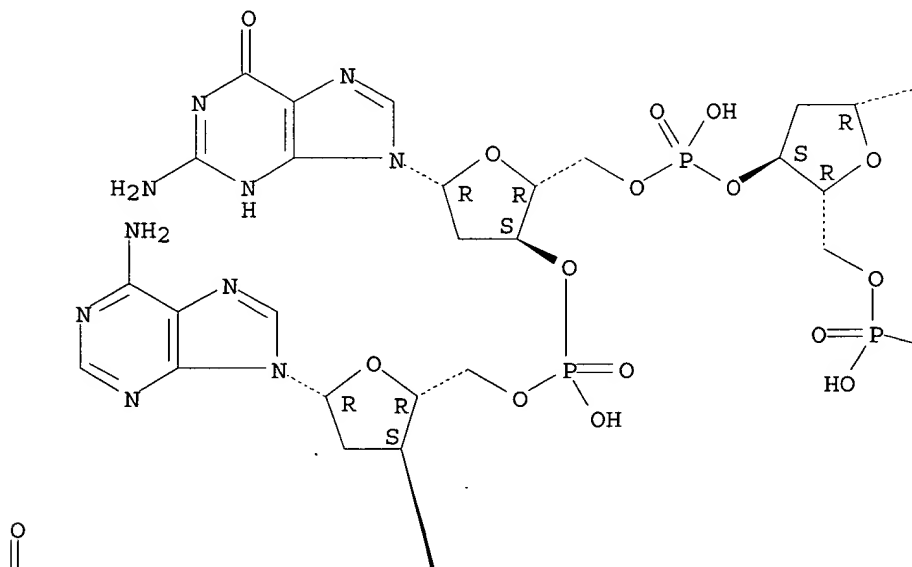
(hepatitis C virus-complementary oligonucleotides and analogs and their use in prophylaxis, treatment and diagnosis of viral infection)

RN 185946-81-0 CAPLUS

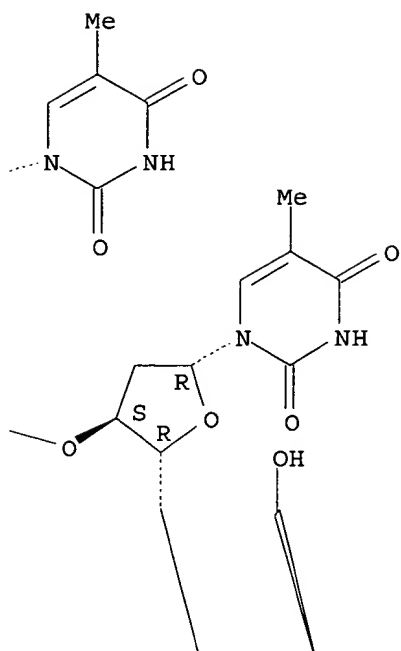
CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

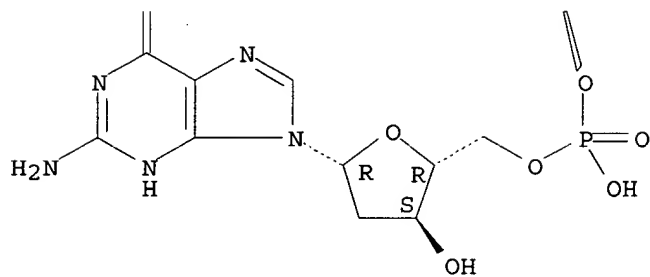
PAGE 1-A



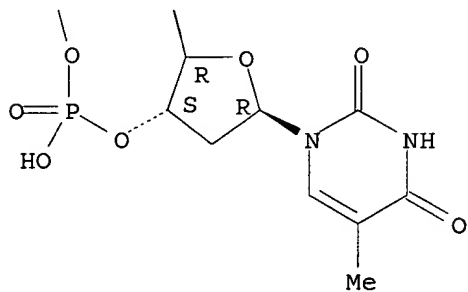
PAGE 1-B



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PAGE 2-B



ACCESSION NUMBER: 1996:621459 CAPLUS
 DOCUMENT NUMBER: 125:273628
 TITLE: Anti-DNA antibody detection involving telomeric DNA
 sequence recognition and binding
 INVENTOR(S): Salonen, Eeva-Marjatta
 PATENT ASSIGNEE(S): Finland
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9627131 | A1 | 19960906 | WO 1996-FI117 | 19960229 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML | | | | |
| FI 9500962 | A | 19960902 | FI 1995-962 | 19950301 |
| FI 100556 | B1 | 19971231 | | |
| US 5700641 | A | 19971223 | US 1995-396238 | 19950301 |
| ZA 9601628 | A | 19960808 | ZA 1996-1628 | 19960229 |
| AU 9647215 | A1 | 19960918 | AU 1996-47215 | 19960229 |
| AU 720912 | B2 | 20000615 | | |
| EP 812421 | A1 | 19971217 | EP 1996-903036 | 19960229 |
| EP 812421 | B1 | 20020619 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| NZ 301725 | A | 20010223 | NZ 1996-301725 | 19960229 |
| AT 219580 | E | 20020715 | AT 1996-903036 | 19960229 |
| ES 2175069 | T3 | 20021116 | ES 1996-903036 | 19960229 |
| PRIORITY APPLN. INFO.: | | | FI 1995-962 | A 19950301 |
| | | | WO 1996-FI117 | W 19960229 |

ED Entered STN: 19 Oct 1996

AB The invention relates to a diagnostic method for detection of anti-DNA antibodies in patients with lupus erythematosus, particularly SLE, test kit, solid phase means and a therapeutic method and a drug. All these applications are characterized by the use of telomeric DNA sequences able to bind specifically to anti-DNA-antibodies. Preferred antibody-binding telomeric sequences comprise 5'-TTAGGG-3', 5'-CCCTAA-3', repeats thereof or double stranded vertebrate telomere. Solid phase removal of anti-DNA antibodies with solid phase bound telomeric sequences and use of the telomeric sequences as a drug for treatment of patients with autoimmune disorders are revealed.

IT 117490-04-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

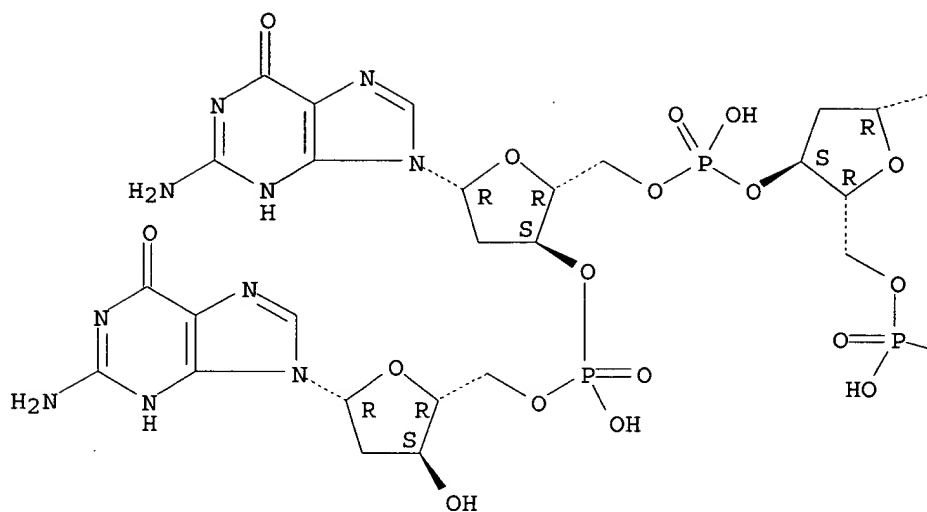
(telomeric DNA sequence for determination of anti-DNA antibody and for diagnosis and treatment of autoimmune disease)

RN 117490-04-7 CAPLUS

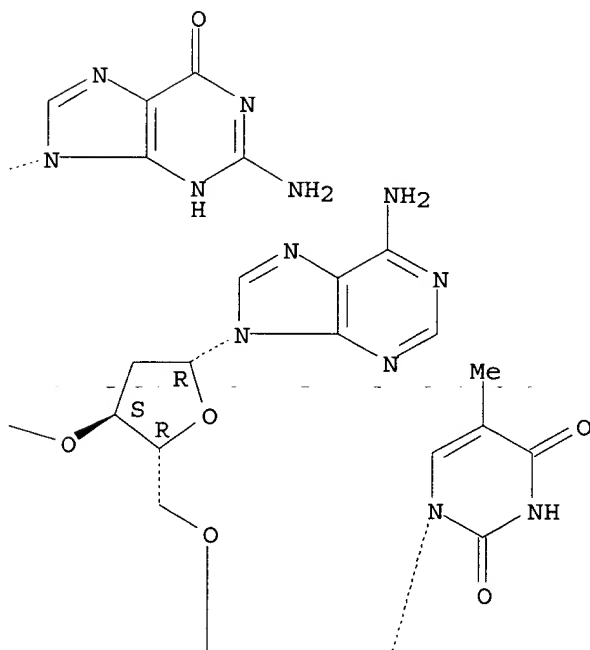
CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

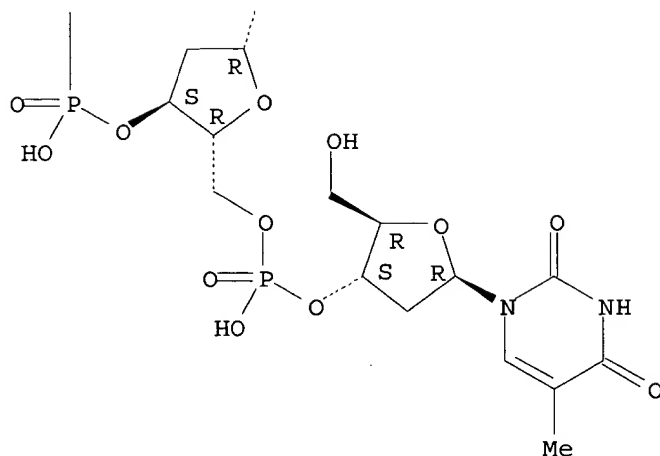
PAGE 1-A



PAGE 1-B



PAGE 2-B



L46 ANSWER 18 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:458116 CAPLUS

DOCUMENT NUMBER: 125:110182

TITLE: The ahpCF operon of Mycobacterium and its role in isoniazid resistance and the treatment of infection

INVENTOR(S): Collins, Desmond Michael; Wilson, Theresa

PATENT ASSIGNEE(S): New Zealand Pastoral Agriculture Research Institute Limited, N. Z.

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 9619578 | A2 | 19960627 | WO 1995-NZ133 | 19951220 |
| WO 9619578 | A3 | 19960829 | | |
| W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF | | | | |
| CA 2210378 | AA | 19960627 | CA 1995-2210378 | 19951220 |
| EP 805863 | A2 | 19971112 | EP 1995-941938 | 19951220 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| AU 708456 | B2 | 19990805 | AU 1996-43185 | 19951220 |
| PRIORITY APPLN. INFO.: | | | NZ 1994-270222 | A 19941220 |
| | | | WO 1995-NZ133 | W 19951220 |

ED Entered STN: 03 Aug 1996

AB Methods for identifying and characterizing an operon that det. mycobacterial resistance to the antibiotic isoniazid (INH) and its analogs is described. This operon, termed ahpCF, encodes polypeptides, AhpC and AhpF, which likely combine to form an active alkyl hydroperoxide reductase enzyme that may either be a direct target for INH or act to confer INH resistance. The sequence of the mutant ahpCF operon is provided, showing that INH resistance can be conferred by a mutation in the promoter and polypeptides that are useful in diagnosis and treatment. Cloning of the isoniazid resistance factor of Mycobacterium bovis by expression in M.

smegmatis is described. The factor was identified as the *ahpCF* operon and sequences of wild-type and mutant operons were compared to identify the mutations responsible for resistance. Antisense oligonucleotides capable of inhibiting expression of the *ahpCF* operon may be used to overcome isoniazid resistance.

IT 179127-92-5

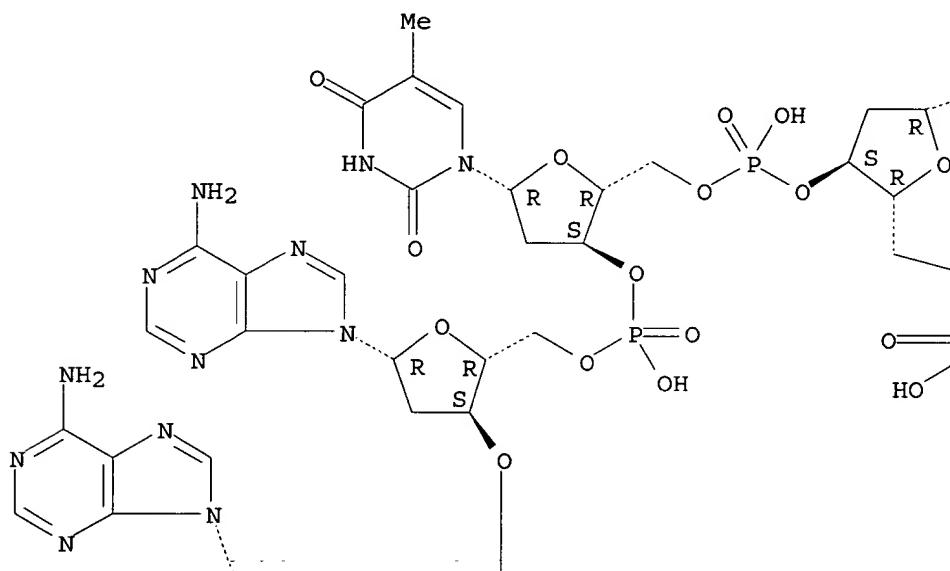
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for detection of mutation in *ahpCF* operon; *ahpCF* operon of *Mycobacterium* and its role in isoniazid resistance and treatment of infection)

RN 179127-92-5 CAPLUS

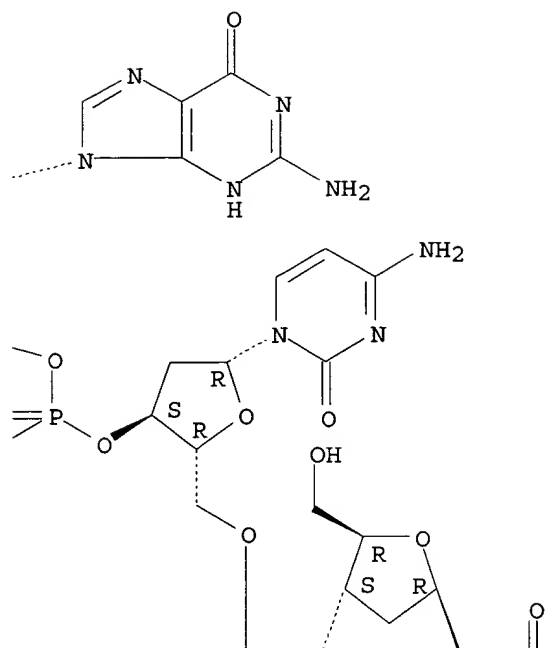
CN Cytidine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

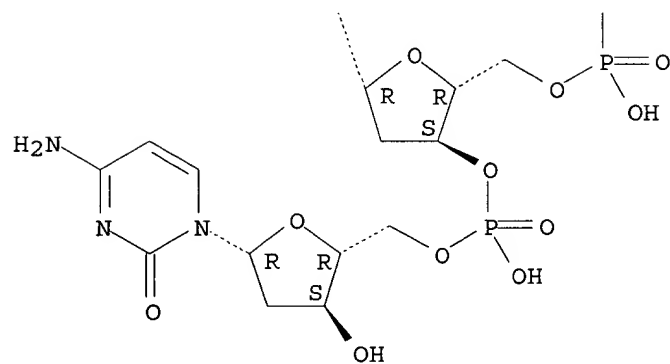
PAGE 1-A



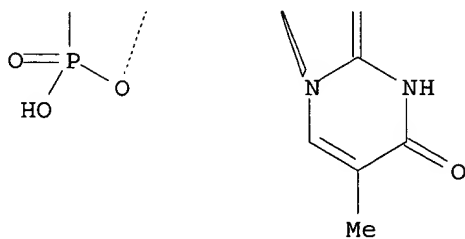
PAGE 1-B



PAGE 2-A



PAGE 2-B



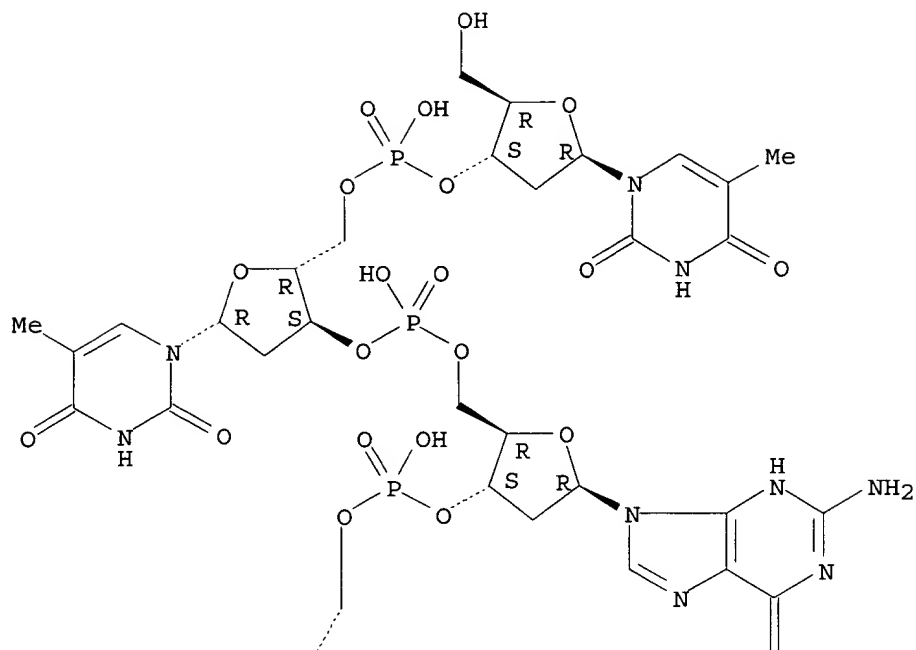
L46 ANSWER 19 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:288256 CAPLUS
 DOCUMENT NUMBER: 124:333058
 TITLE: Antiviral phosphorothioate oligodeoxyribonucleotides
 for clinical application
 INVENTOR(S): Shoji, Yoko; Shimada, Jingoro; Mizushima, Yutaka;
 Iwatani, Wakao; Tamura, Nobuya
 PATENT ASSIGNEE(S): Ltt Institute Co., Ltd., Japan; Kaken Pharmaceutical
 Co., Ltd.
 SOURCE: PCT Int. Appl., 163 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9603500 | A1 | 19960208 | WO 1995-JP1472 | 19950725 |
| W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9529912 | A1 | 19960222 | AU 1995-29912 | 19950725 |
| PRIORITY APPLN. INFO.: | | | JP 1994-173862 | A 19940726 |
| | | | JP 1994-268603 | A 19941101 |
| | | | WO 1995-JP1472 | W 19950725 |

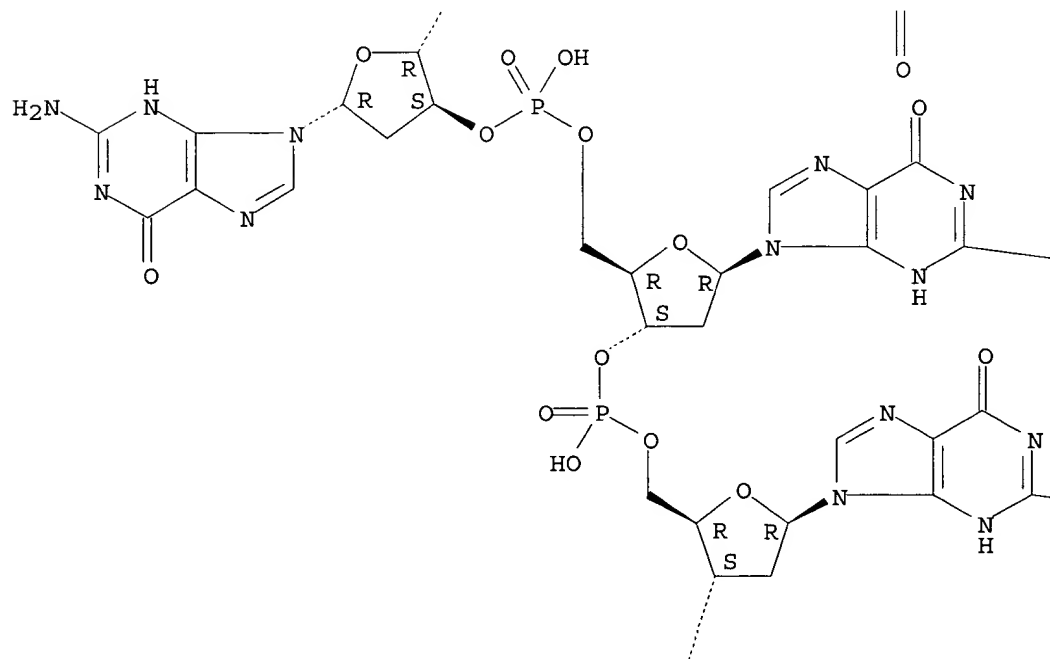
ED Entered STN: 15 May 1996
 AB Synthetic phosphorothioate oligodeoxyribonucleotides having 5-30 base
 units and contain ≥ 1 base sequence 5'-GXGGG-3' (X= adenine,
 thymine, guanine or cytosine), its salt, and derivs. are provided for
 antiviral agents. The oligodeoxyribonucleotides have a high antiviral
 activity against herpes simplex virus (HSV), varicella zoster virus (VZV),
 and human immunodeficiency virus (HIV) and are useful for treating or
 preventing various viral infections. Some of the
 oligodeoxyribonucleotides are complementary to the splicing acceptor of
 immediate early precursor mRNA4 or mRNA5 of HIV I and show effective viral
 growth-inhibiting activities.
 IT 126208-94-4P 176328-94-2P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (preparation and clin. application of antiviral phosphorothioate
 oligodeoxyribonucleotides)
 RN 126208-94-4 CAPLUS
 CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-
 (3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

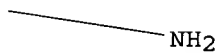
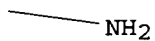
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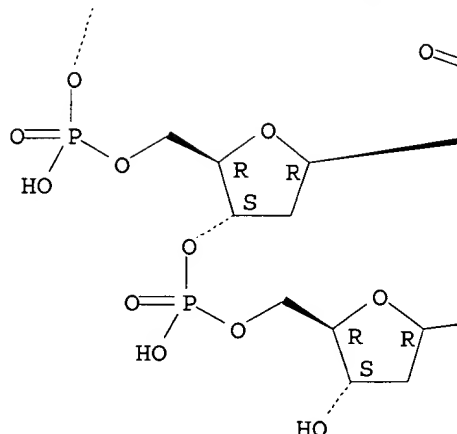
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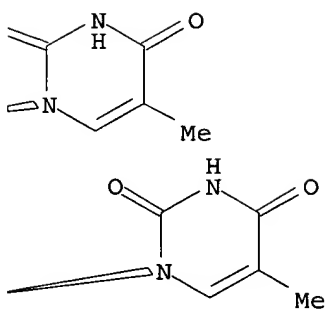
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PAGE 3-A



PAGE 3-B

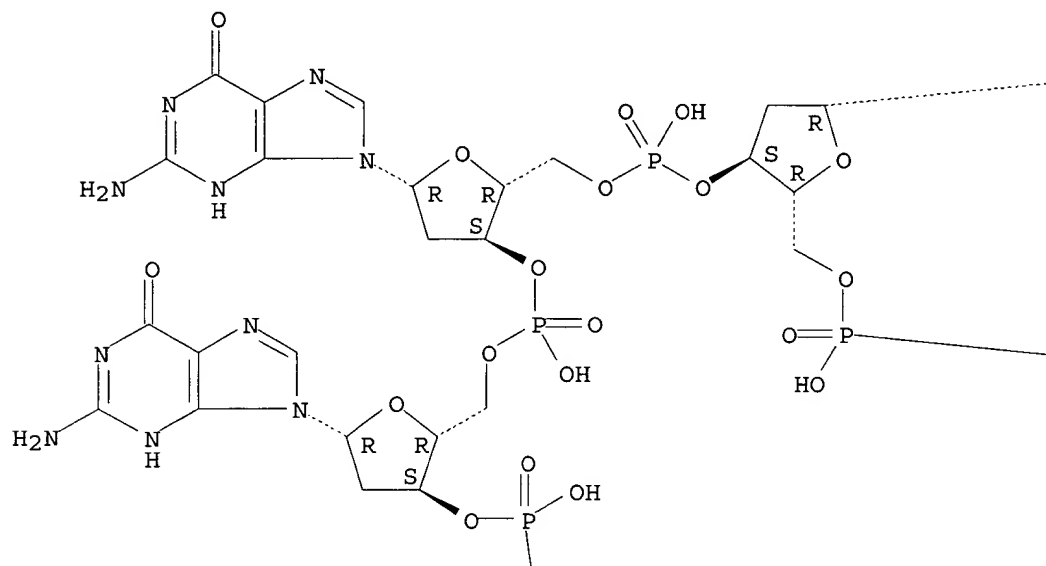


RN 176328-94-2 CAPLUS

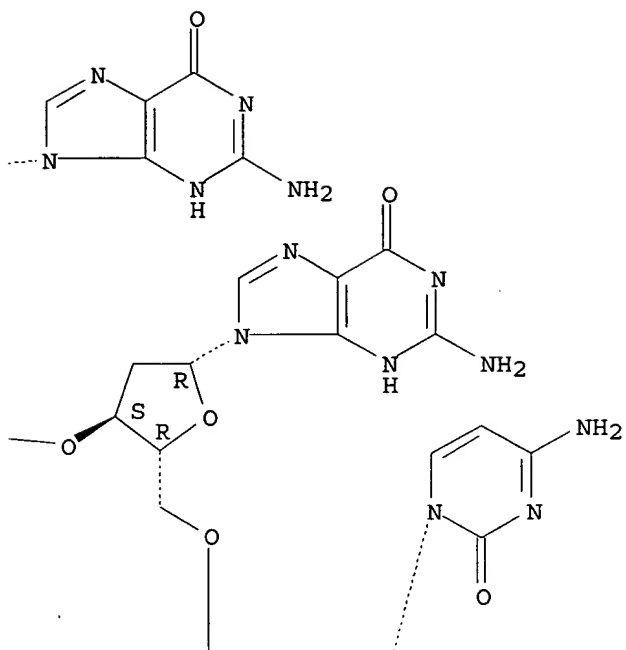
CN Adenosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

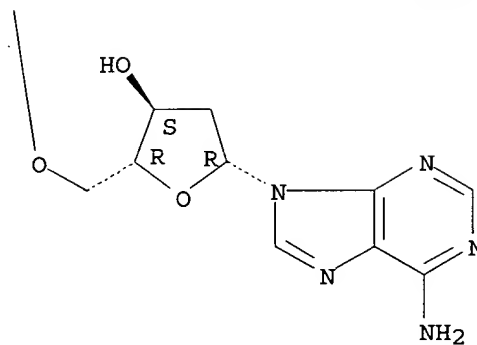
PAGE 1-A



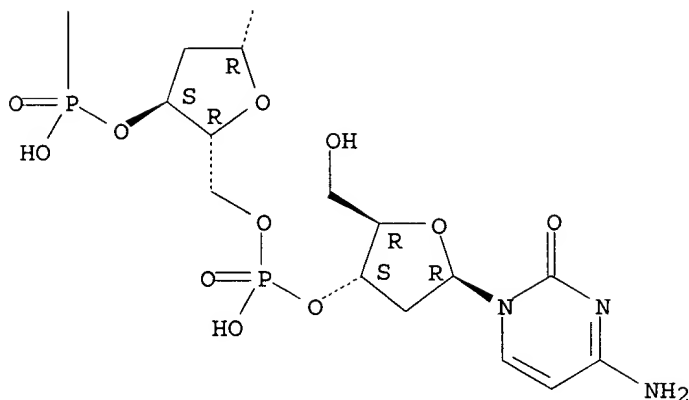
PAGE 1-B



PAGE 2-A



PAGE 2-B



L46 ANSWER 20 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:392130 CAPLUS
 DOCUMENT NUMBER: 125:76345
 TITLE: Inhibition of human immunodeficiency virus by
 tetramer-forming d(GGGG)-containing oligonucleotides
 INVENTOR(S): Ecker, David J.; Wyatt, Jacqueline R.; Imbach, Jean L.
 PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., USA
 SOURCE: U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 954, 185,
 abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| US 5523389 | A | 19960604 | US 1993-128011 | 19930928 |
| HU 70965 | A2 | 19951128 | HU 1995-911 | 19930929 |
| EP 1016715 | A1 | 20000705 | EP 1999-203835 | 19930929 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| PRIORITY APPLN. INFO.: | | | US 1992-954185 | B2 19920929 |
| | | | EP 1993-922788 | A3 19930929 |

ED Entered STN: 09 Jul 1996

AB The phosphorothioate oligonucleotide T2G4T2 (ISIS 5320) was identified as an inhibitor of HIV infection in vitro by combinatorial screening of a library of phosphorothioate oligonucleotides that contained all possible 8-nucleotide sequences. The oligonucleotide forms a parallel-stranded tetrameric guanosine quartet (G-quartet) structure. Tetramer formation and the phosphorothioate backbone are essential for antiviral activity. The G-quartet structure binds to the HIV envelope protein gp120 at the V3 loop and inhibits both cell-to-cell and virus-to-cell infection.

IT **126208-94-4D**, phosphorothioated at one or more residues
 RL: **BAC (Biological activity or effector, except adverse)**; **BSU**
 (Biological study, unclassified); **THU (Therapeutic use)**; **BIOL**
 (Biological study); **USES (Uses)**
 (inhibition of human immunodeficiency virus by tetramer-forming
 d(GGGG)-containing oligonucleotides)

RN 126208-94-4 CAPLUS

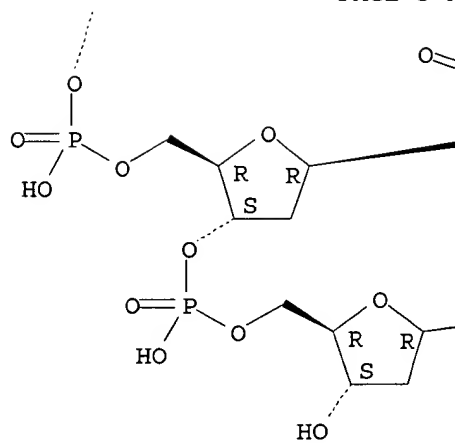
CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-

PAGE 2-B

NH₂

NH₂

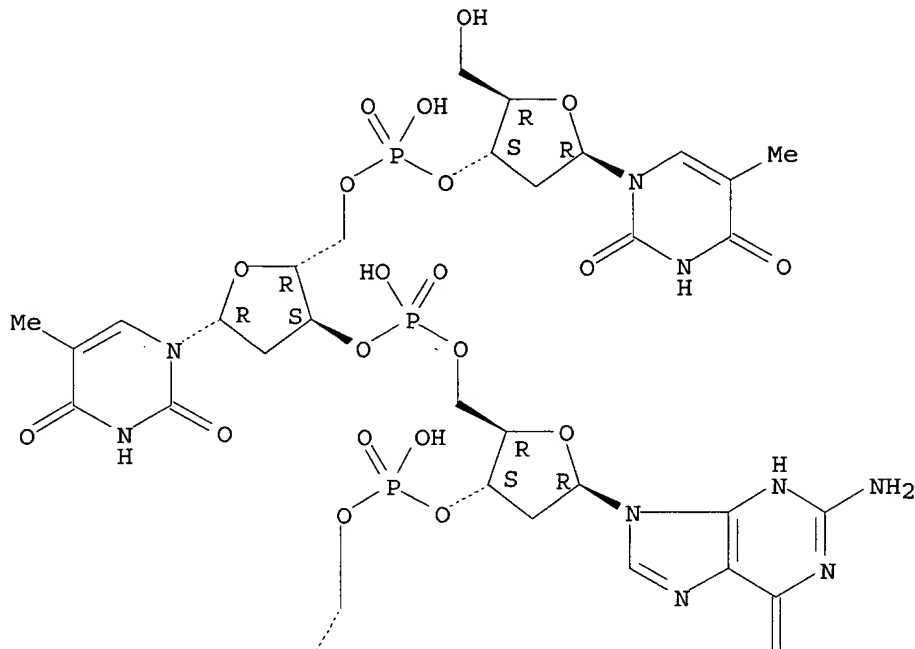
PAGE 3-A



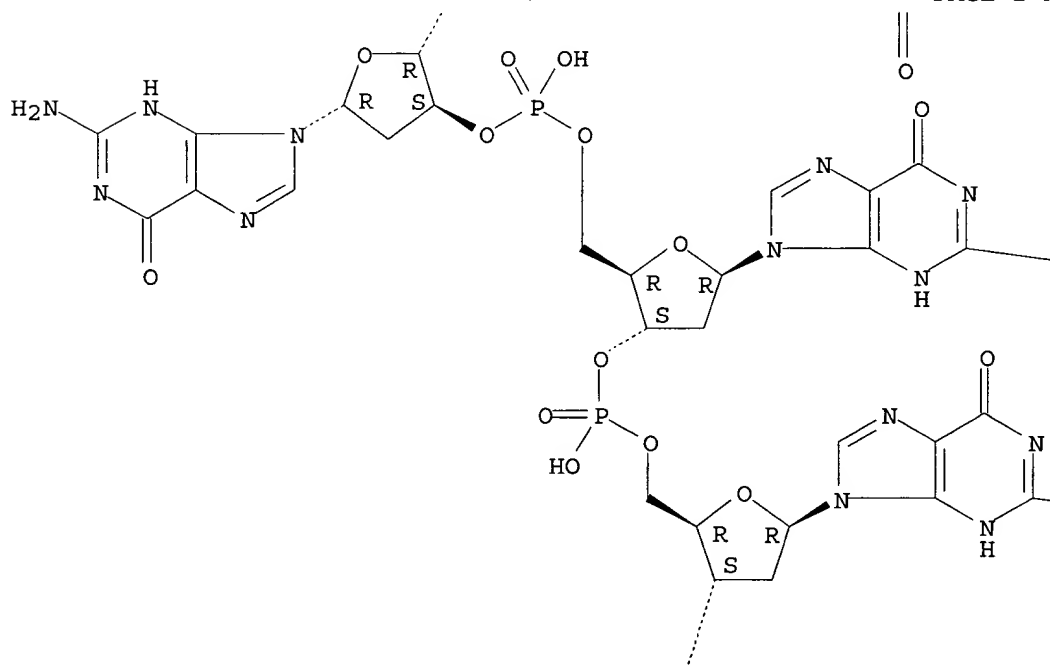
deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-
(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



=> fil capl; d que nos l35; s (l35 and l23) not l44
FILE 'CAPLUS' ENTERED AT 14:18:57 ON 30 SEP 2005
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FILE COVERS 1907 - 30 Sep 2005 VOL 143 ISS 15
FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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| L20 | | STR | |
| L22 | 2568 | SEA FILE=REGISTRY SSS FUL | L20 |
| L23 | 166 | SEA FILE=CAPLUS ABB=ON | L16 |
| L24 | 1716 | SEA FILE=CAPLUS ABB=ON | L22 |
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| L26 | 834 | SEA FILE=CAPLUS ABB=ON | L25 NOT PY>1997 |
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| L29 | 1007 | SEA FILE=CAPLUS ABB=ON | L26 OR L28 |
| L30 | 146 | SEA FILE=CAPLUS ABB=ON | (L23 OR L24) (L) (THU OR BAC OR PAC OR PKT OR DMA)/RL |
| L31 | 383 | SEA FILE=CAPLUS ABB=ON | (L23 OR L24) AND PHARMAC?/SC,SX |
| L33 | 55668 | SEA FILE=CAPLUS ABB=ON | (IMMUNOSTIM? OR IMMUNOMOD? OR IMMUNOSUP PRES?)/CW |
| L34 | 50 | SEA FILE=CAPLUS ABB=ON | L31 AND L33 |
| L35 | 51 | SEA FILE=CAPLUS ABB=ON | (L30 OR L34) AND L29 |

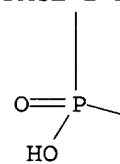
L47 14 (L35 AND L23) NOT L44

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in structure
search
answer set*

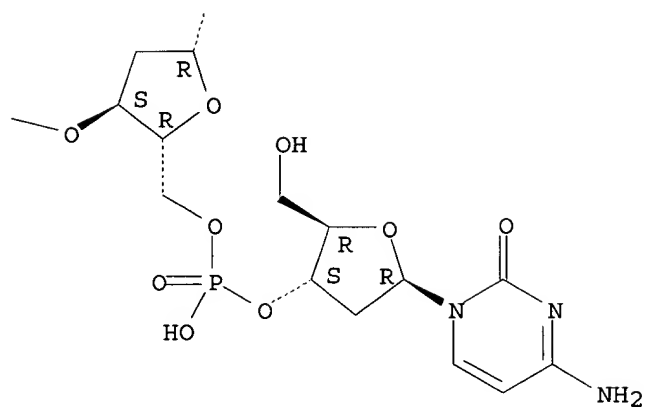
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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Sep 2005 (20050929/PD)
FILE LAST UPDATED: 29 Sep 2005 (20050929/ED)
HIGHEST GRANTED PATENT NUMBER: US6951031
HIGHEST APPLICATION PUBLICATION NUMBER: US2005217002

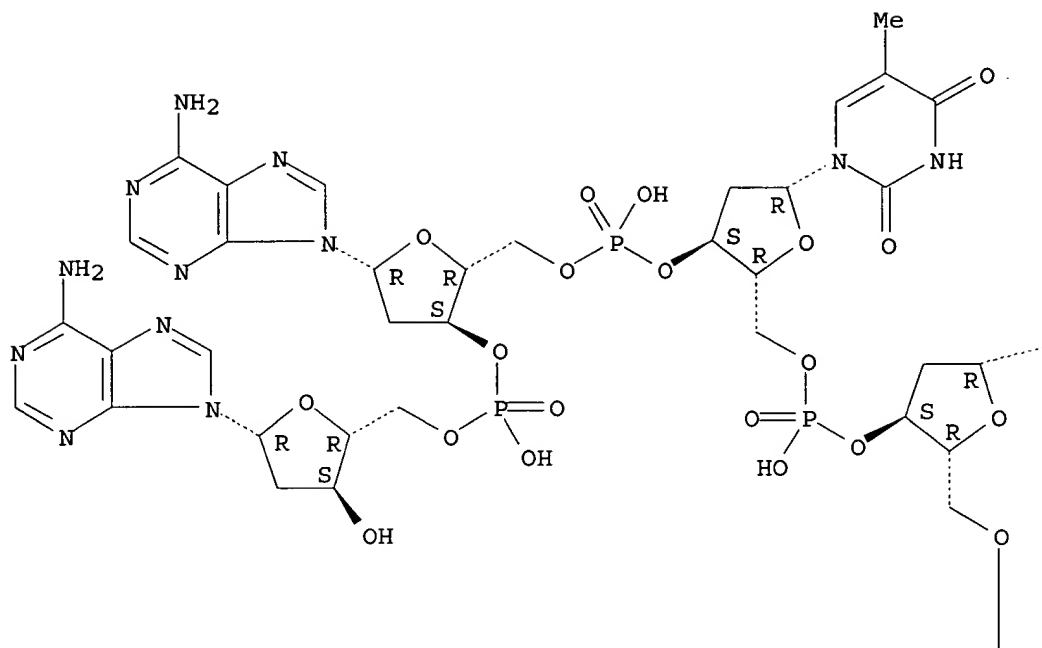
PAGE 2-A



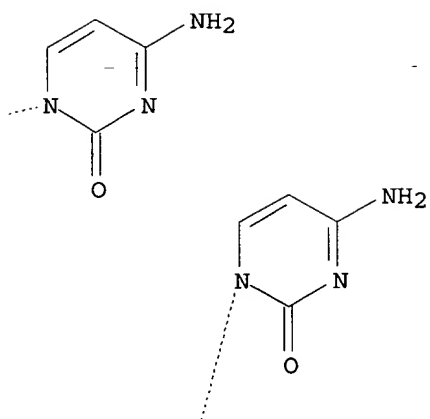
PAGE 2-B



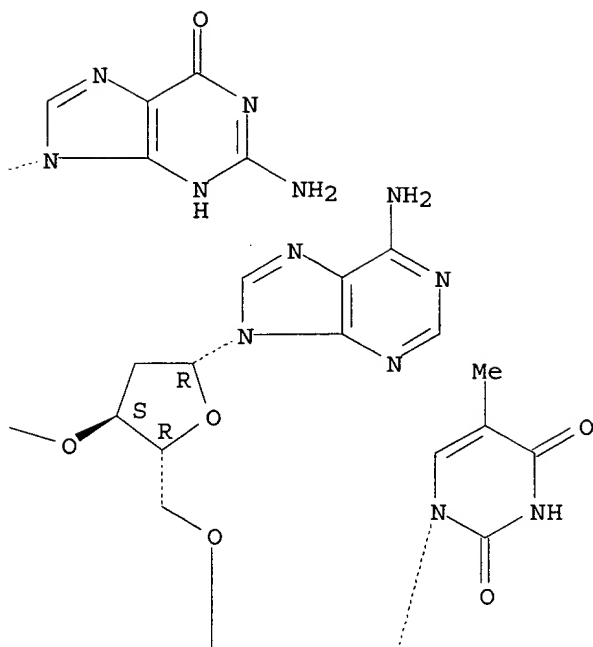
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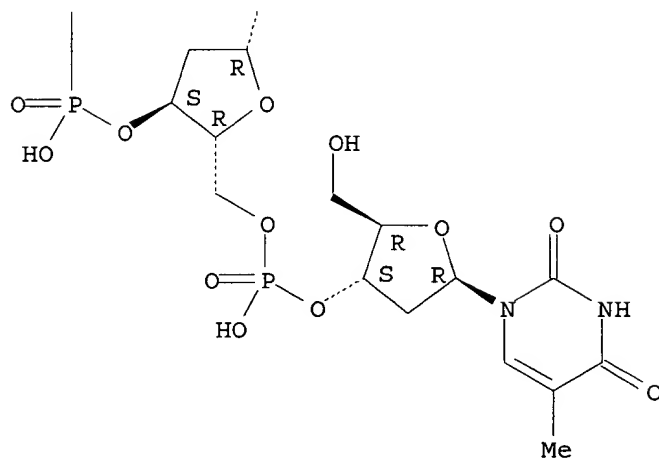
PAGE 1-B



PAGE 1-B



PAGE 2-B



CM 2

CRN 89802-96-0

CMF C57 H74 N21 O33 P5

CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary
(9CI) (CA INDEX NAME)

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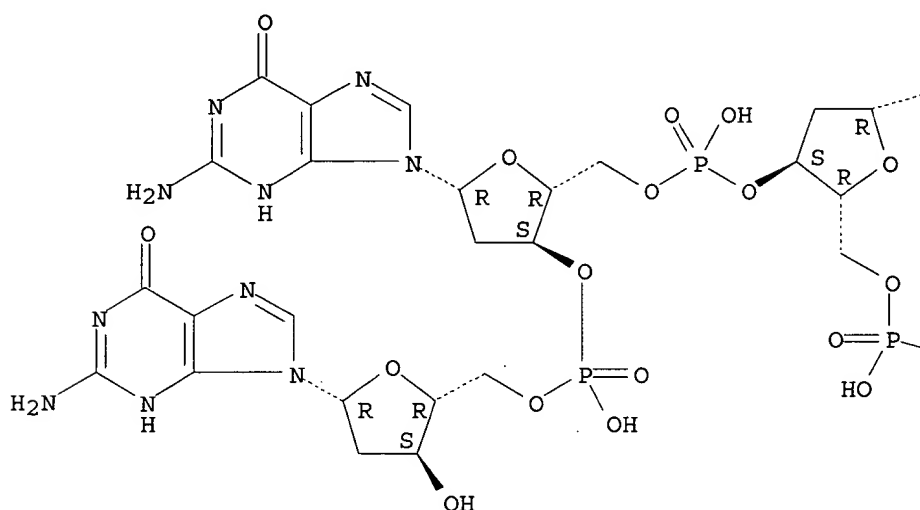
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CMF C60 H75 N24 O35 P5

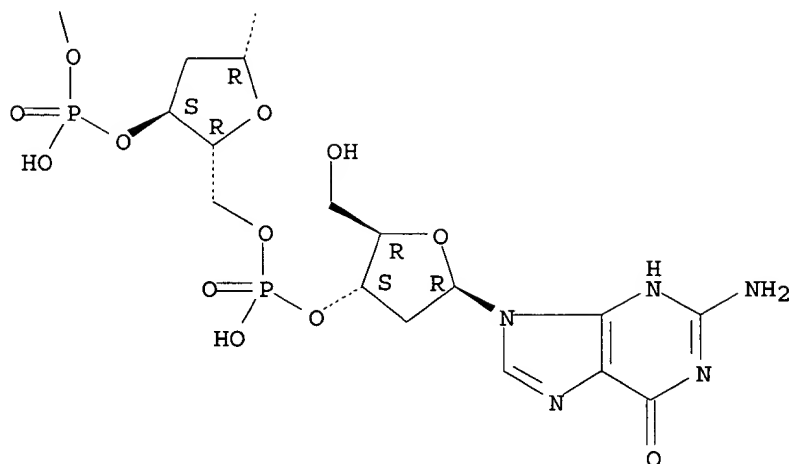
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 1-A



PAGE 2-B



L46 ANSWER 53 OF 53 USPATFULL on STN

ACCESSION NUMBER: 1998:33758 USPATFULL

TITLE: Telomere repeat binding factor and diagnostic and therapeutic use thereof

INVENTOR(S): De Lange, Titia, New York, NY, United States

PATENT ASSIGNEE(S): The Rockefeller University, New York, NY, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5733730 | | 19980331 |
| APPLICATION INFO.: | US 1995-519103 | | 19950825 (8) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Campbell, Eggerton A. | | |
| LEGAL REPRESENTATIVE: | Klauber & Jackson | | |
| NUMBER OF CLAIMS: | 19 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 9 Drawing Page(s) | | |
| LINE COUNT: | 1919 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel nucleotide sequence encoding a telomeric protein which binds a repeat region of telomeric sequences, and to the protein encoded thereby. Also included within the invention are expression vectors for the production of the telomeric protein and host cells transformed with the nucleotide sequence. In addition, antibodies, probes and antagonists specific for the telomeric protein are contemplated. Methods of identifying antagonists of the telomeric protein, diagnostic methods of identifying the telomeric protein in a sample, and therapeutic uses of the telomeric protein, particularly in the treatment of aging and cancer, are also contemplated.

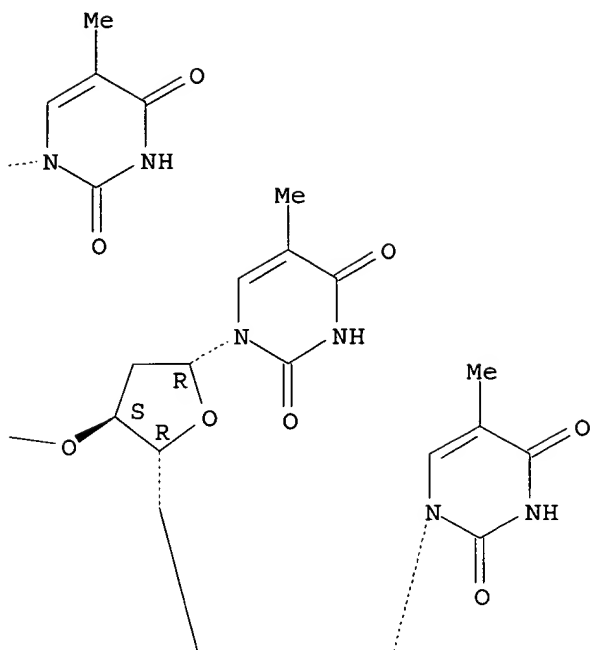
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 157961-44-9D, oligomers

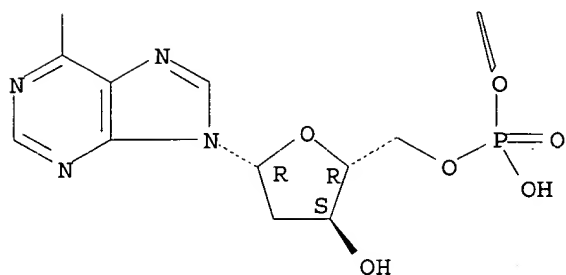
(as affinity ligand for human telomere repeat factor; mammalian telomere repeat binding factor and gene encoding it and their diagnostic and therapeutic uses)

RN 157961-44-9 USPATFULL

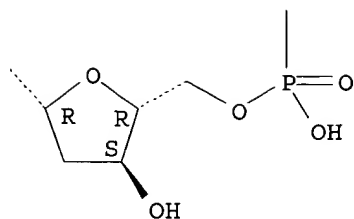
PAGE 1-B



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CM 2

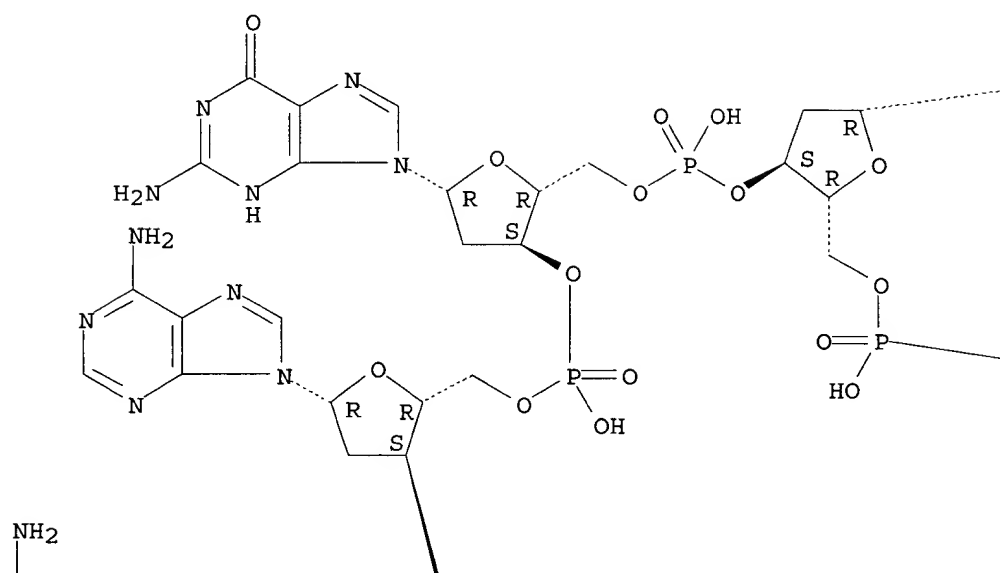
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CMF C70 H88 N26 O41 P6

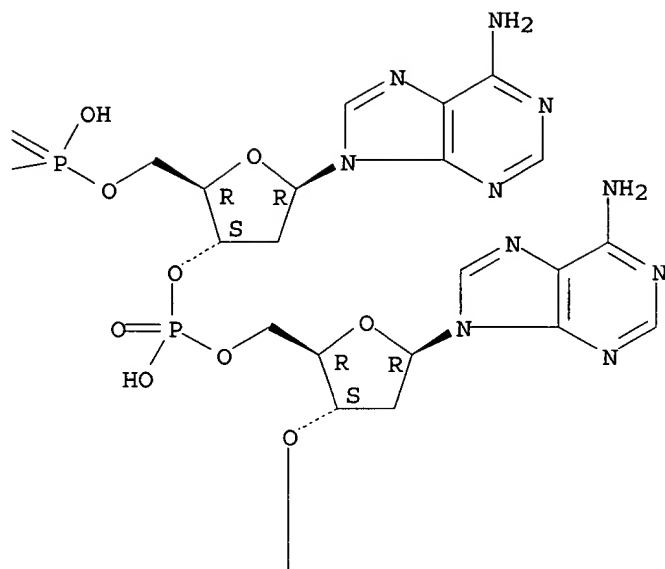
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

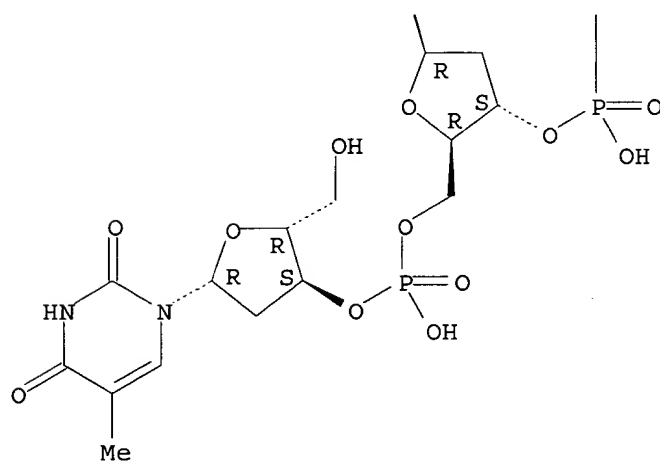
PAGE 1-A



PAGE 1-B



PAGE 2-A



NUMBER OF DRAWINGS: 8 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 959

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A DNA sequence for the gene therapy of tumors is described. In its essential elements, the DNA sequence is composed of an activator sequence, a promoter module and a gene for the active substance. The activator sequence is activated, in a cell-specific manner, in proliferating endothelial cells or in cells which are adjacent to these endothelial cells. This activation is regulated by the promoter module in a cell cycle-specific manner. The active substance is an inhibitor of angiogenesis or a cytostatic or cytotoxic molecule. The DNA sequence is inserted into a viral or non-viral vector which is supplemented with a ligand which possesses affinity for the activated endothelial cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 177792-83-5

(CHR element of cdc25C gene; genetic **therapy** of diseases caused by immune system using genetic construct regulated in cell- or virus-specific, cell cycle-dependent manner)

RN 177792-83-5 USPATFULL

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

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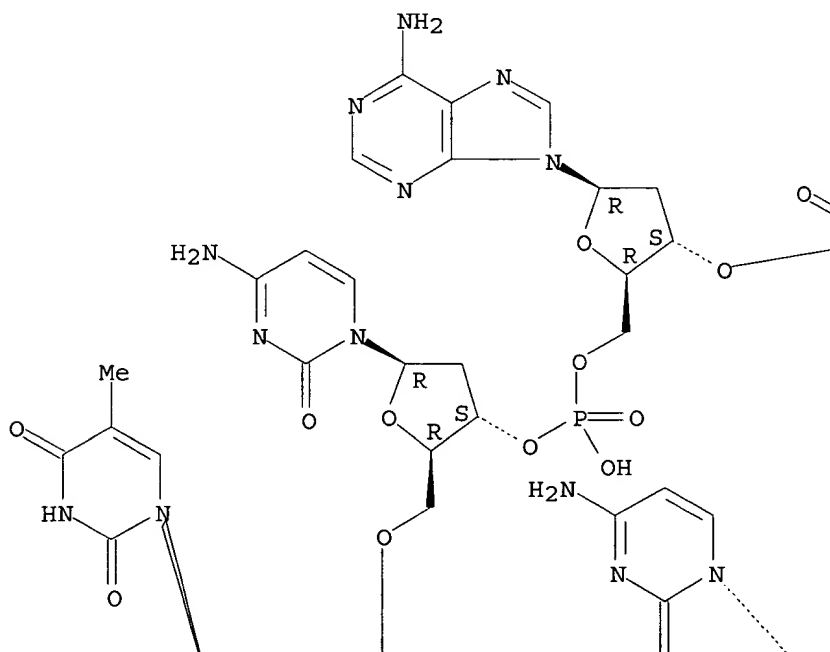
CRN 177792-82-4

CMF C68 H87 N25 O39 P6

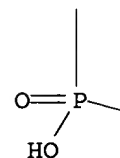
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

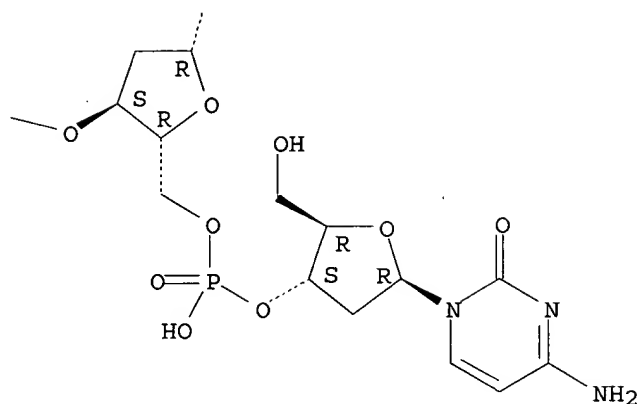
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PAGE 2-A



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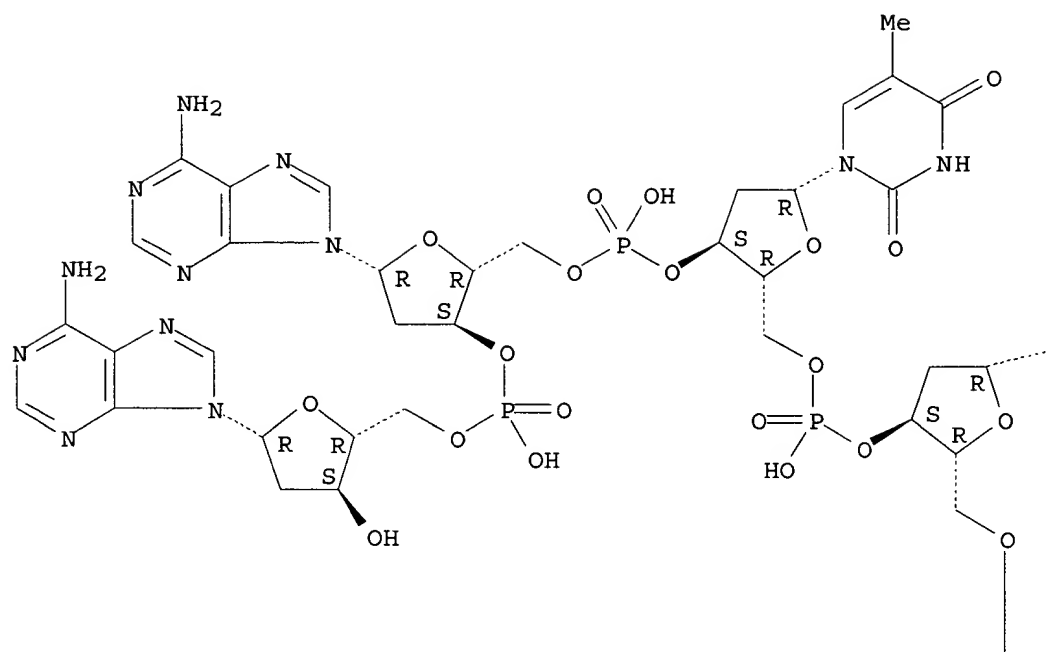


L46 ANSWER 52 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 1998:135027 USPATFULL
 TITLE: Gene therapy of tumors with an endothelial
 cell-specific, cell cycle-dependent active compound
 INVENTOR(S): Sedlacek, Hans-Harald, Marburg, Germany, Federal
 Republic of
 Bosslet, Klaus, Marburg, Germany, Federal Republic of
 Muller, Rolf, Marburg, Germany, Federal Republic of
 PATENT ASSIGNEE(S): Hoechst Aktiengesellschaft, Frankfurt am Main, Germany,
 Federal Republic of (non-U.S. corporation)

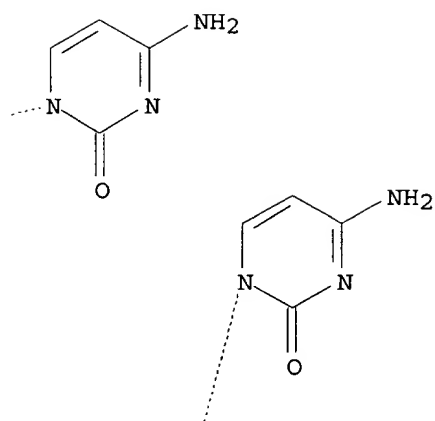
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| PATENT INFORMATION: | US 5830880 | | 19981103 |
| | WO 9606940 | | 19960307 |
| APPLICATION INFO.: | US 1997-793107 | | 19970418 (8) |
| | WO 1995-EP3370 | | 19950825 |
| | | | 19970418 PCT 371 date |
| | | | 19970418 PCT 102(e) date |

| | NUMBER | DATE |
|-----------------------|--------------------|----------|
| PRIORITY INFORMATION: | GB 1994-17366 | 19940826 |
| | GB 1995-6466 | 19950329 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Campbell, Bruce R. | |
| LEGAL REPRESENTATIVE: | Foley & Lardner | |
| NUMBER OF CLAIMS: | 52 | |
| EXEMPLARY CLAIM: | 1 | |

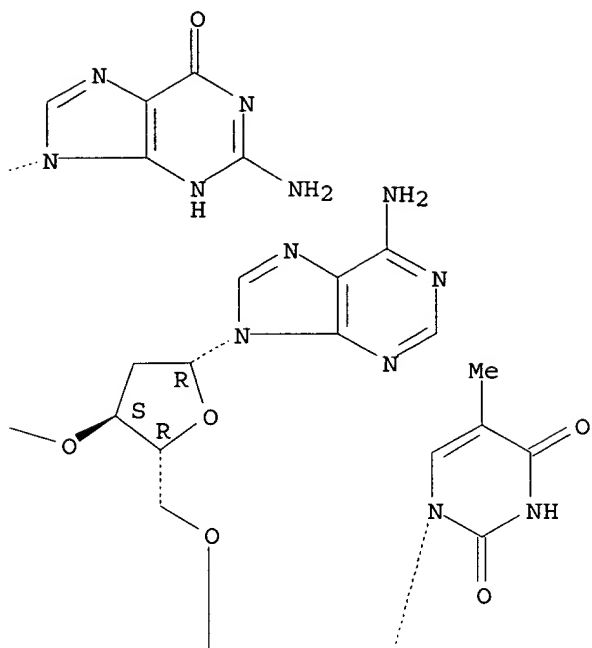
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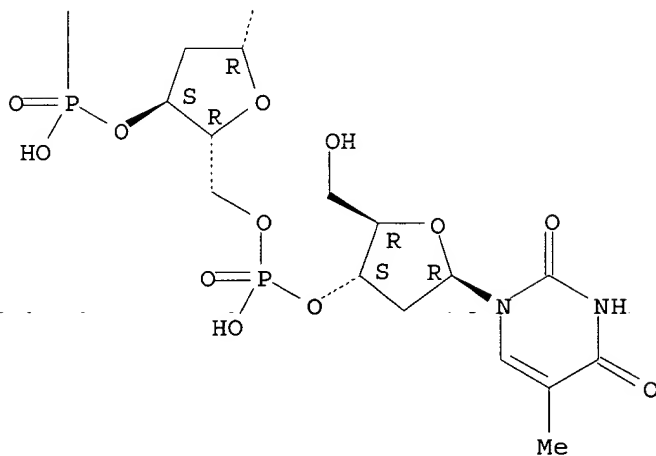
PAGE 1-B



PAGE 1-B



PAGE 2-B



CM 2

CRN 89802-96-0

CMF C57 H74 N21 O33 P5

CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

EXEMPLARY CLAIM: 1

LINE COUNT: 1904

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids comprising the RNA component of a mammalian telomerase are useful as pharmaceutical, therapeutic, and diagnostic reagents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 157961-44-9

(mammalian telomerase RNA component sequences, regulation by oligonucleotides, and uses in gene **therapy** and cancer diagnosis)

RN 157961-44-9 USPATFULL

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

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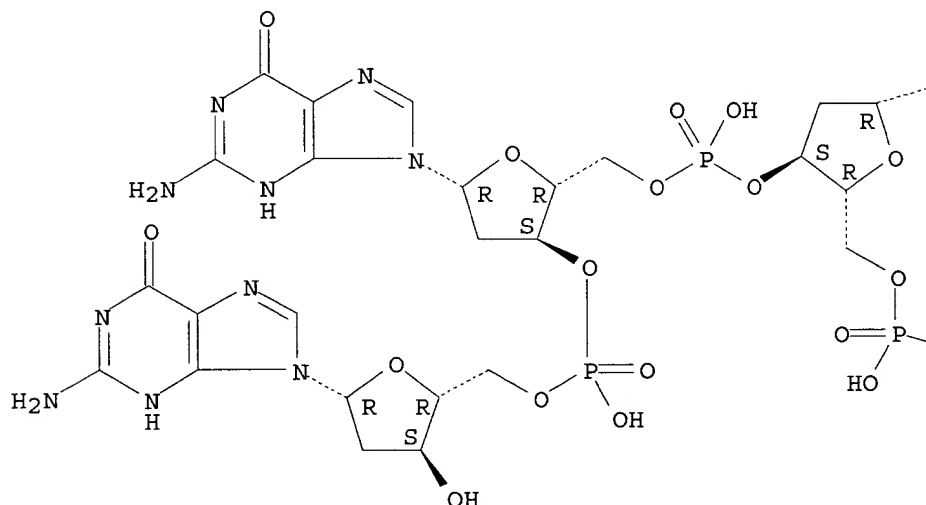
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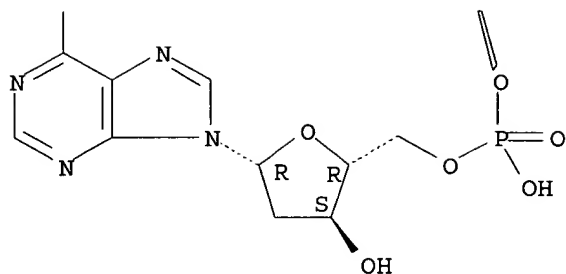
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

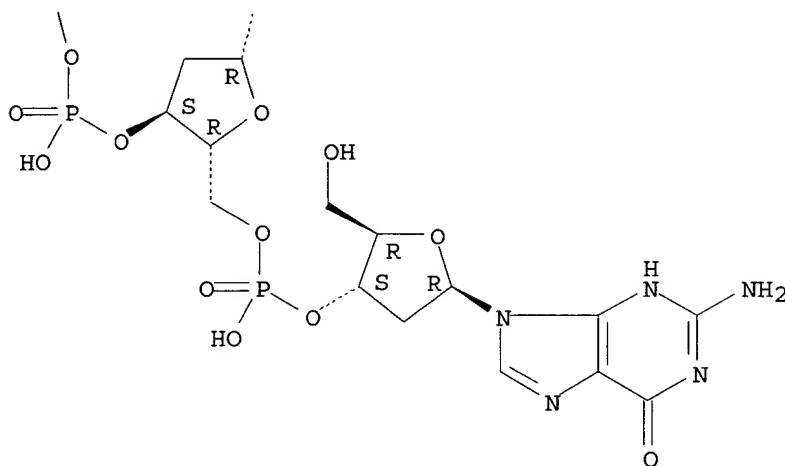
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PAGE 2-A



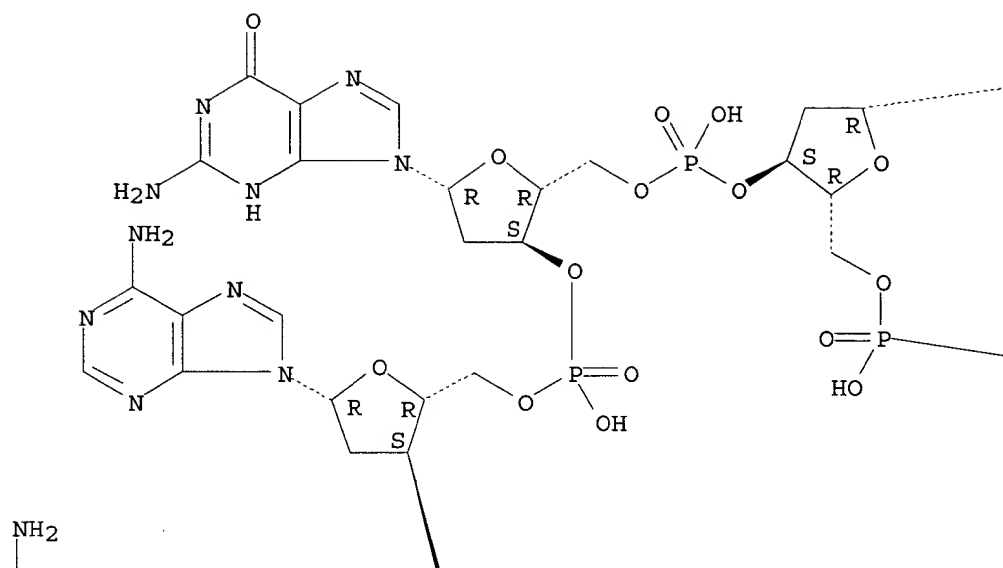
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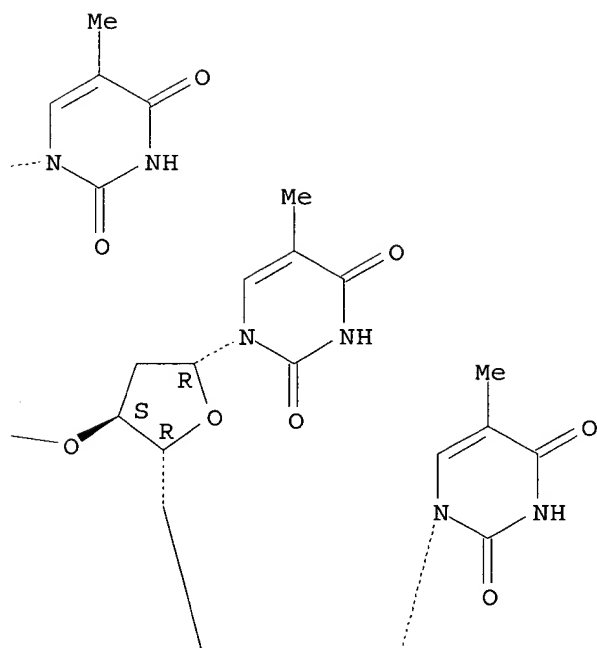
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 ACCESSION NUMBER: 1998:144253 USPATFULL
 TITLE: Mammalian telomerase
 INVENTOR(S): Villeponteau, Bryant, San Carlos, CA, United States
 Feng, Junli, San Carlos, CA, United States
 Funk, Walter, Union City, CA, United States
 Andrews, William H., Richmond, CA, United States
 PATENT ASSIGNEE(S): Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

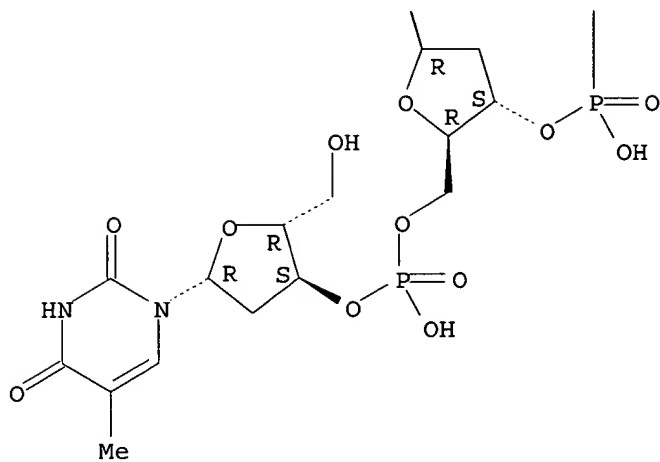
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| PATENT INFORMATION: | US 5837857 | | 19981117 |
| APPLICATION INFO.: | US 1996-660678 | | 19960605 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1994-330123, filed on 27 Oct 1994, now patented, Pat. No. US 5583016, issued on 10 Dec 1996 which is a continuation-in-part of Ser. No. US 1994-272102, filed on 7 Jul 1994, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Houtteman, Scott W. | | |
| LEGAL REPRESENTATIVE: | Kaster, Esq., Kevin R., Storella, Esq., John | | |
| NUMBER OF CLAIMS: | 48 | | |

PAGE 1-A



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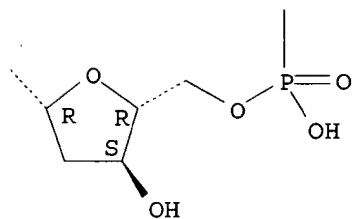




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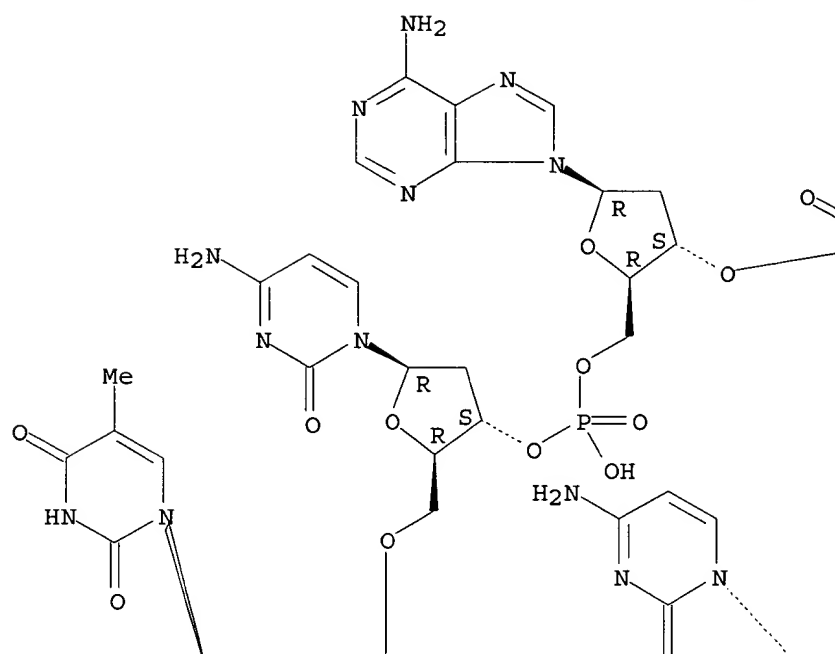


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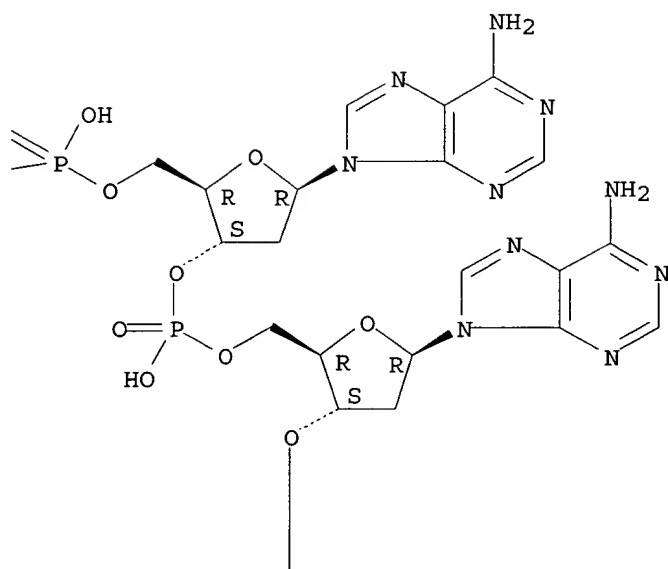
CRN 177792-81-3
CMF C70 H88 N26 O41 P6
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

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| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 5854019 | | 19981229 |
| APPLICATION INFO.: | US 1996-679217 | | 19960712 (8) |

| | NUMBER | DATE |
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| PRIORITY INFORMATION: | DE 1995-19524720 | 19950712 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Low, Christopher S. F. | |
| ASSISTANT EXAMINER: | Nguyen, Dave Trong | |
| LEGAL REPRESENTATIVE: | Foley & Lardner | |
| NUMBER OF CLAIMS: | 16 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 5 Drawing Figure(s); 4 Drawing Page(s) | |
| LINE COUNT: | 529 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to promoter sequences for a gene comprising a tissue inhibitor of metalloproteinase-3 (TIMP-3). This inhibitor is found in particular in macrophages, synovial cells, and connective tissue cells. The invention also relates to cell-specific gene therapy of a subject, wherein expression of a gene in a tissue is regulated by the aforementioned promoter sequence operationally coupled to said gene. The promoter may also be used in diagnostic methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 177792-83-5

(CHR element of cdc25C gene; genetic therapy of diseases caused by immune system using genetic construct regulated in cell- or virus-specific, cell cycle-dependent manner)

RN 177792-83-5 USPATFULL

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

CM 1

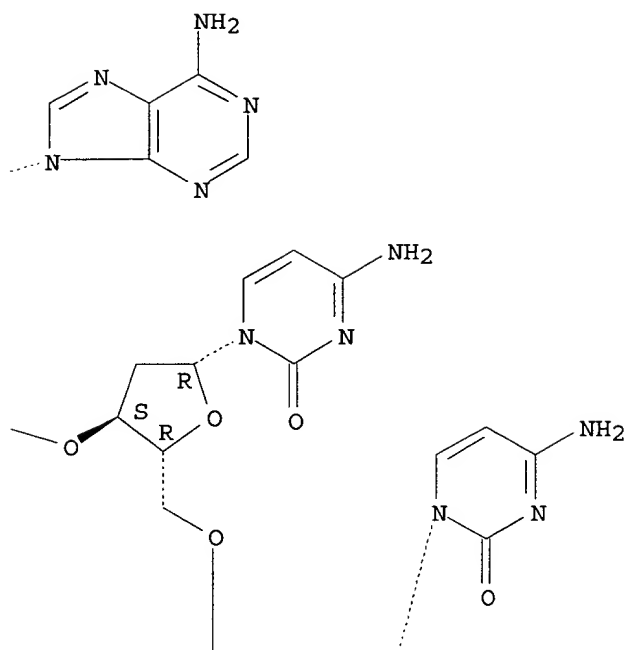
CRN 177792-82-4

CMF C68 H87 N25 O39 P6

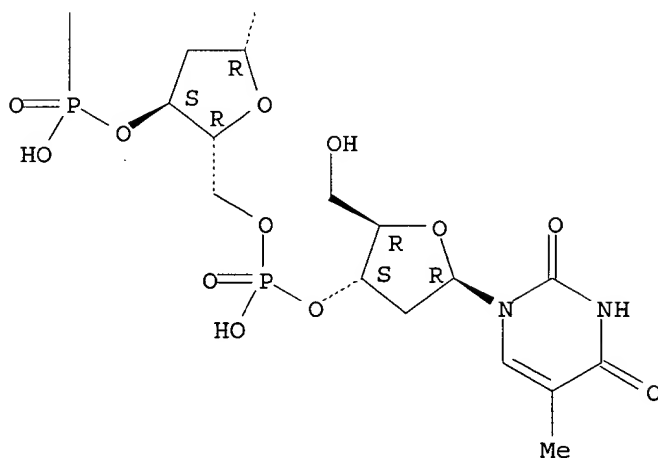
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 1-B



PAGE 2-B



L46 ANSWER 50 OF 53 USPATFULL on STN

ACCESSION NUMBER: 1998:162290 USPATFULL

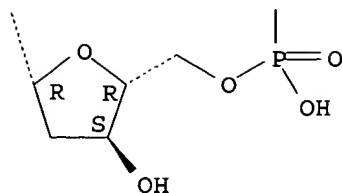
TITLE: Cell-specific gene therapy using as promoter novel promoters for tissue inhibitors of metalloproteinase-3

INVENTOR(S): Sedlacek, Hans-Harald, Marburg, Germany, Federal Republic of

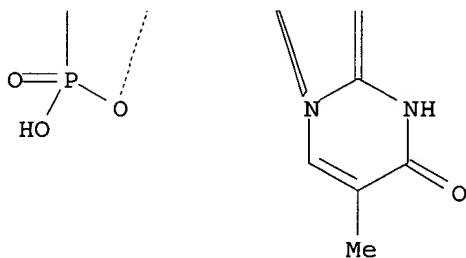
Wick, Marisa, Deutschland, Germany, Federal Republic of
Muller, Rolf, Marburg, Germany, Federal Republic of

PATENT ASSIGNEE(S): Hoechst Aktiengesellschaft, Frankfurt, Germany, Federal Republic of (non-U.S. corporation)

PAGE 2-A



PAGE 2-B

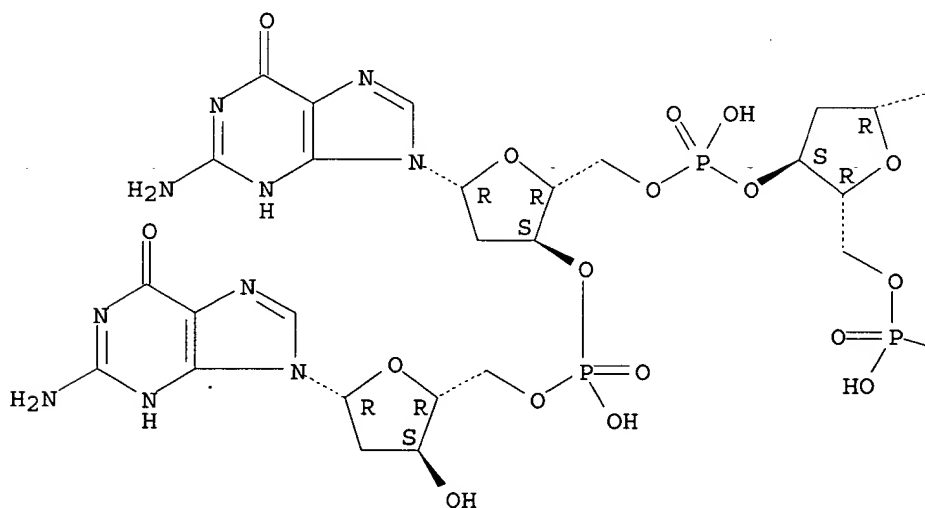


RN 249277-07-4 USPATFULL

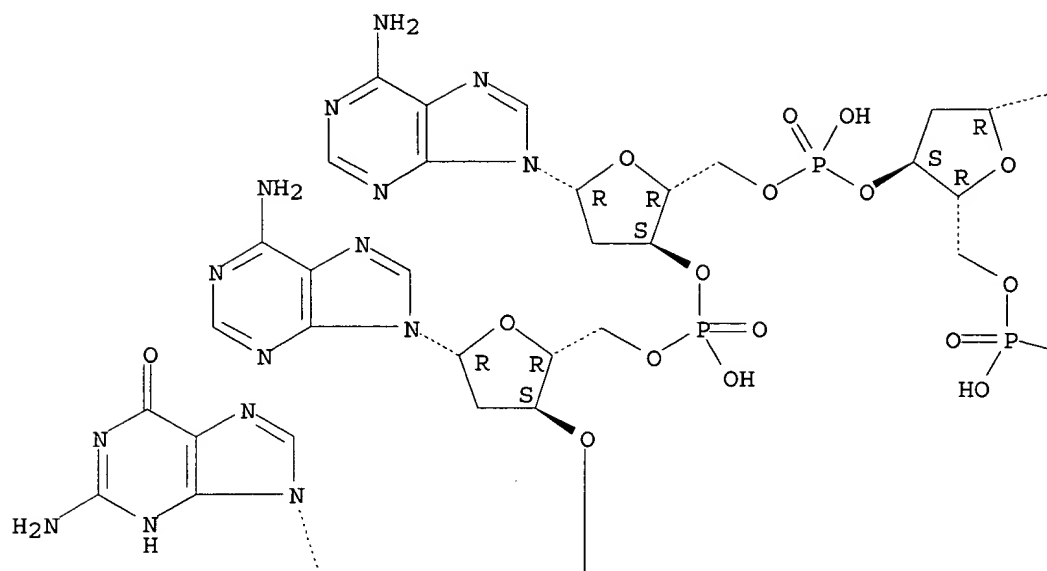
CN Guanosine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

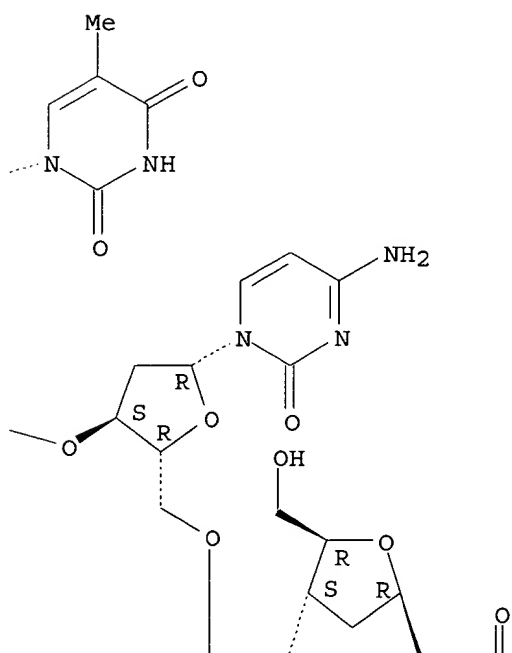
PAGE 1-A



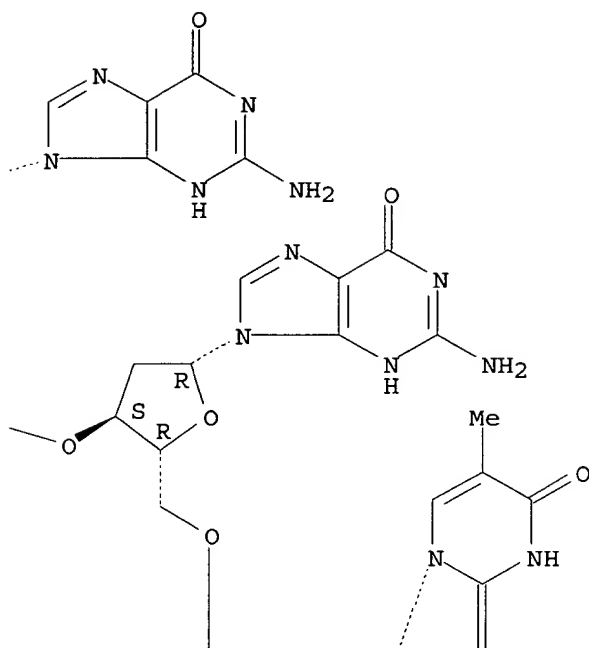
PAGE 1-A



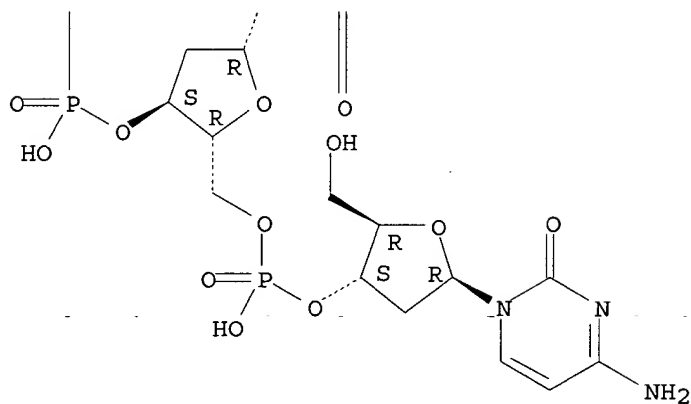
PAGE 1-B



PAGE 1-B



PAGE 2-B

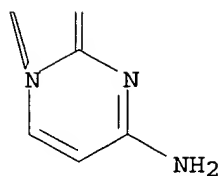


RN 249277-06-3 USPATFULL

CN Guanosine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

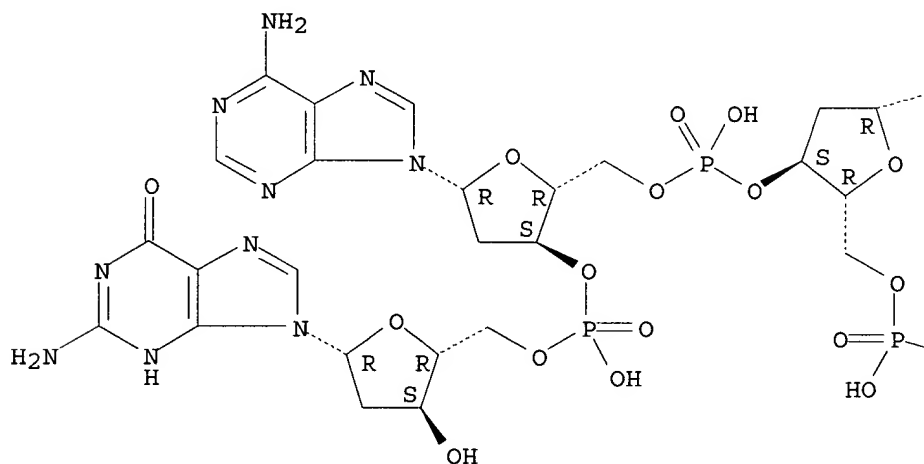
PAGE 2-B



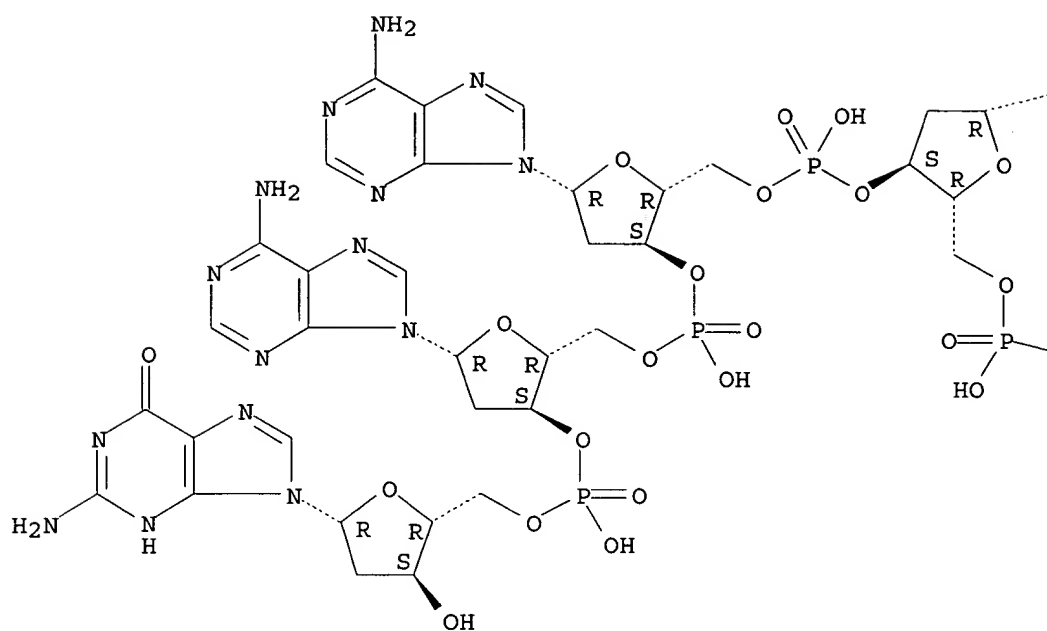
RN 249277-01-8 USPTFULL
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

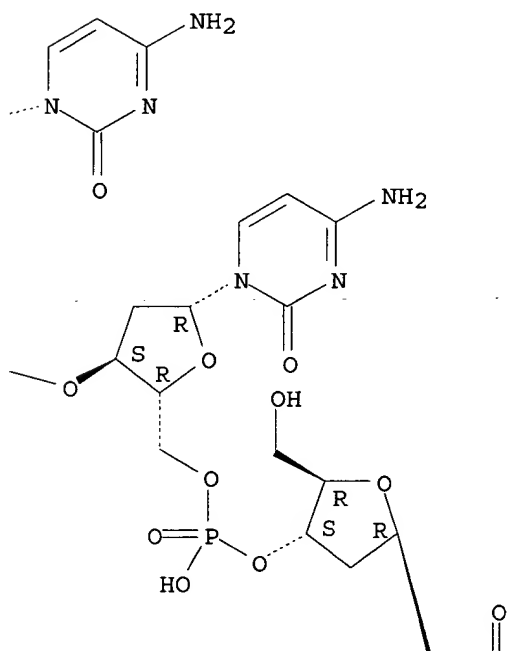
PAGE 1-A



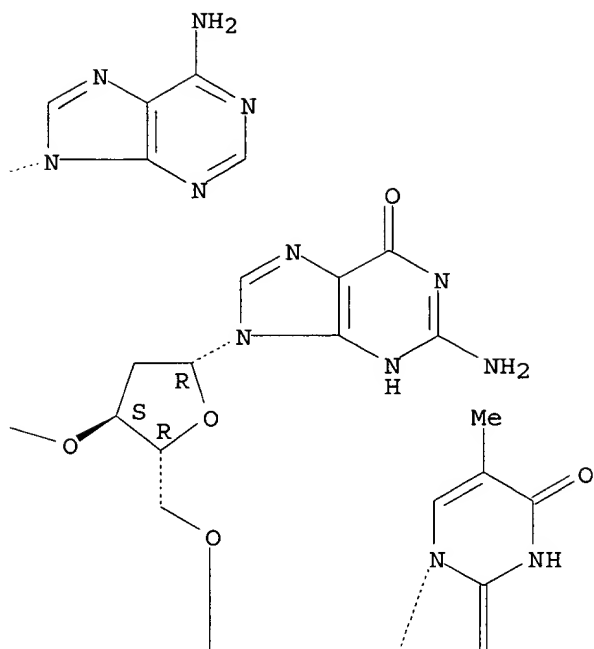
PAGE 1-A



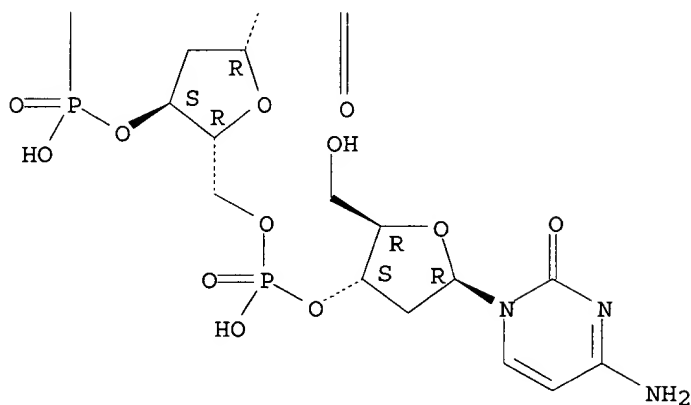
PAGE 1-B



PAGE 1-B



PAGE 2-B

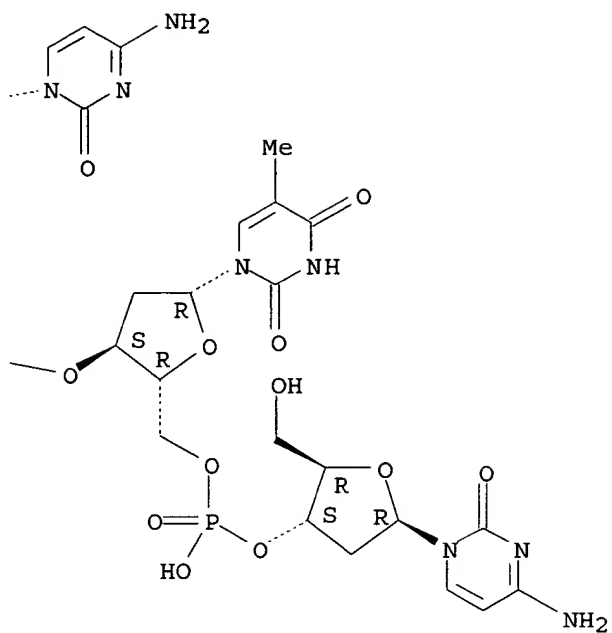


RN 249276-98-0 USPATFULL

CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

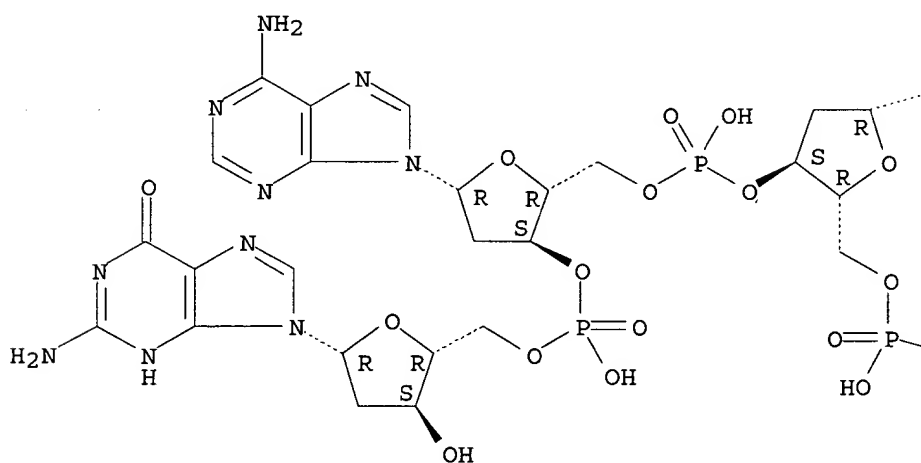


RN 249276-96-8 USPATFULL

CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 166325-99-1 249276-96-8 249276-98-0

249277-01-8 249277-06-3 249277-07-4

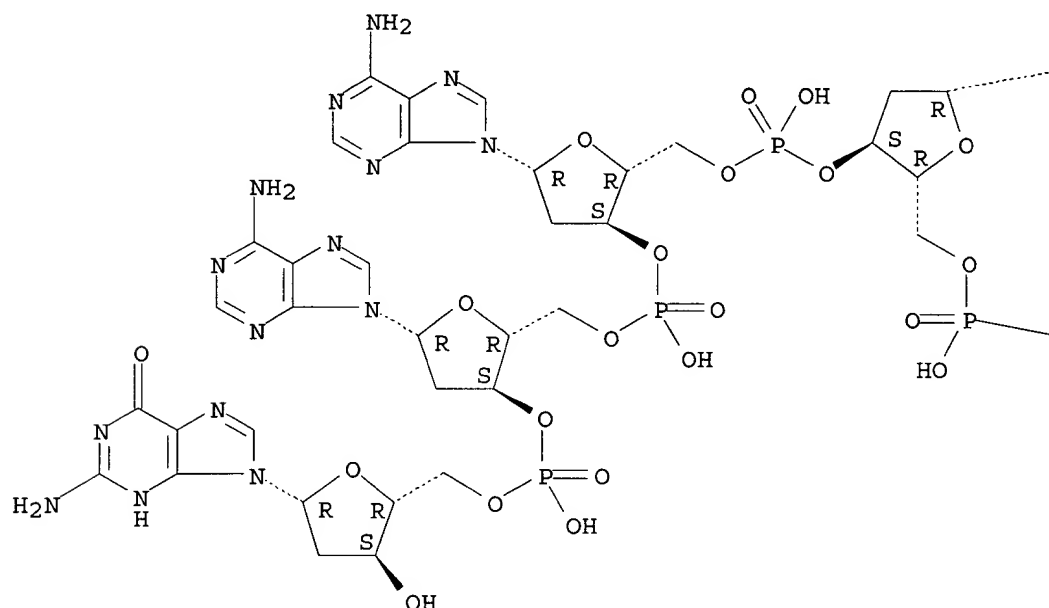
(unclaimed sequence; nucleic acid sequences controlling lung
cell-specific gene expression with **therapeutic** applications)

RN 166325-99-1 USPTAFULL

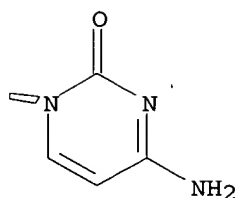
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 2-C



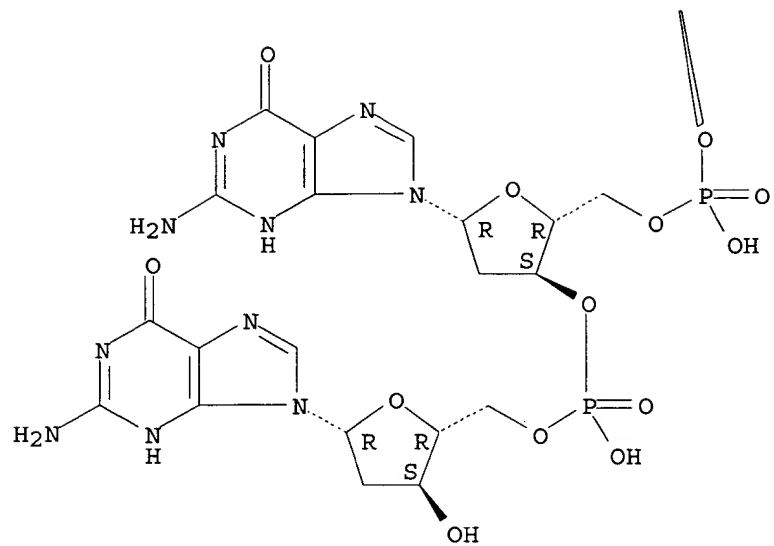
L46 ANSWER 49 OF 53 USPATFULL on STN
ACCESSION NUMBER: 1999:137022 USPATFULL
TITLE: Nucleic acid sequences controlling lung cell-specific gene expression
INVENTOR(S): Bohinski, Robert J., Cincinnati, OH, United States
Whitsett, Jeffrey A., Cincinnati, OH, United States
PATENT ASSIGNEE(S): Children's Hospital Medical Center, Cincinnati, OH, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5976873 | | 19991102 |
| APPLICATION INFO.: | US 1995-442809 | | 19950517 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1994-245356, filed on 18 May 1994, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Brusca, John S. | | |
| LEGAL REPRESENTATIVE: | Olstein, Elliot M., Lillie, Raymond J. | | |
| NUMBER OF CLAIMS: | 12 | | |
| EXEMPLARY CLAIM: | 3 | | |
| NUMBER OF DRAWINGS: | 8 Drawing Figure(s); 50 Drawing Page(s) | | |
| LINE COUNT: | 3815 | | |

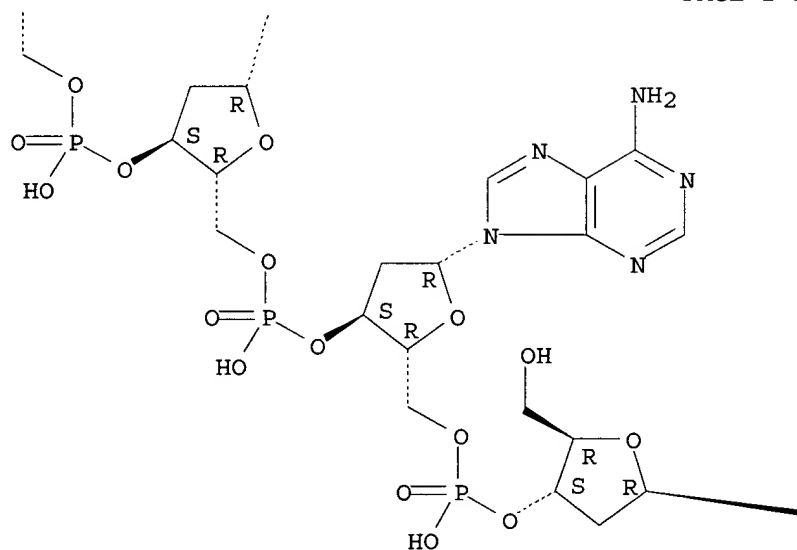
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An oligonucleotide which includes at least one nucleic acid sequence which binds to at least one nuclear protein found in lung cells, such as TTF-1 protein. The oligonucleotide may be contained in a vector. The at least one nuclear protein provides for lung cell-specific expression of the vector upon binding of the at least one nucleic acid sequence to the at least one nuclear protein. Such vector may also include genes encoding therapeutic agents, and may be employed for delivering genes encoding therapeutic agents to lung cells.

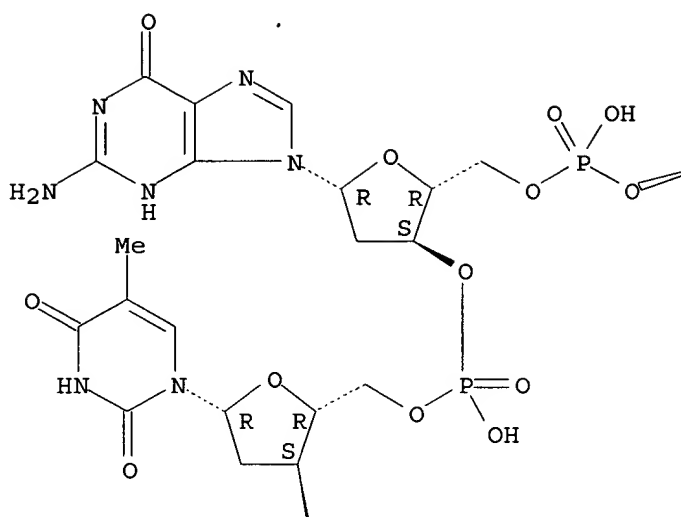
PAGE 2-A



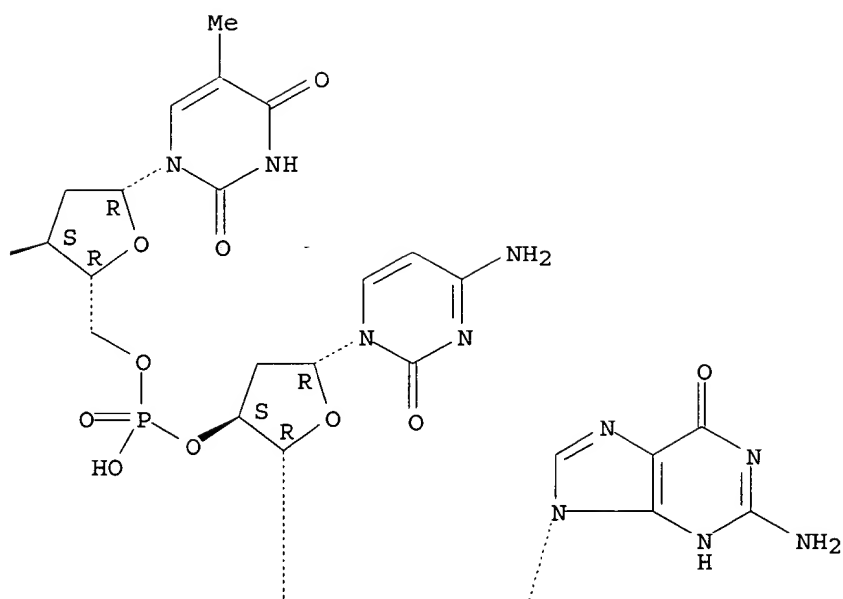
PAGE 2-B



PAGE 1-A



PAGE 1-B



ACCESSION NUMBER: 1999:155722 USPATFULL
TITLE: Oxidant scavengers
INVENTOR(S): Crapo, James D., Durham, NC, United States
Fridovich, Irwin, Durham, NC, United States
Oury, Tim, Durham, NC, United States
Day, Brian J., Durham, NC, United States
Folz, Rodney J., Durham, NC, United States
Freeman, Bruce A., Birmingham, AL, United States
PATENT ASSIGNEE(S): University of Alabama at Birmingham Research
Foundation, Birmingham, AL, United States (U.S.
corporation)
Duke University, Durham, NC, United States (U.S.
corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 5994339 | | 19991130 |
| APPLICATION INFO.: | US 1995-476866 | | 19950607 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1994-322766, filed on 13 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-136207, filed on 15 Oct 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Wax, Robert A. | | |
| ASSISTANT EXAMINER: | Saidha, Tekchand | | |
| LEGAL REPRESENTATIVE: | Nixon & Vanderhye | | |
| NUMBER OF CLAIMS: | 14 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 53 Drawing Figure(s); 38 Drawing Page(s) | | |
| LINE COUNT: | 2910 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates, in general, to a method of modulating physiological and pathological processes and, in particular, to a method of modulating intra- and extracellular levels of oxidants and thereby processes in which such oxidants are a participant. The invention also relates to compounds and compositions suitable for use in such methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 143305-02-6

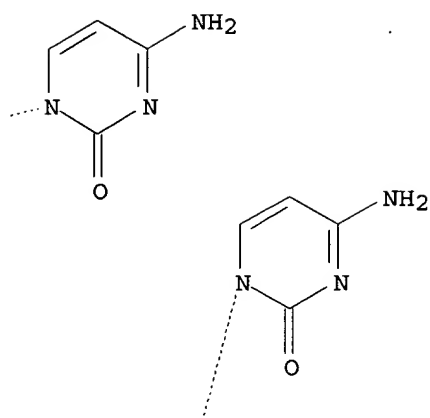
(unclaimed nucleotide sequence; human extracellular superoxide
dismutase for antioxidant **therapy**)

RN 143305-02-6 USPATFULL

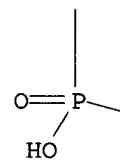
CN DNA, d(C-A-G-C-T-G-T-G-G) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

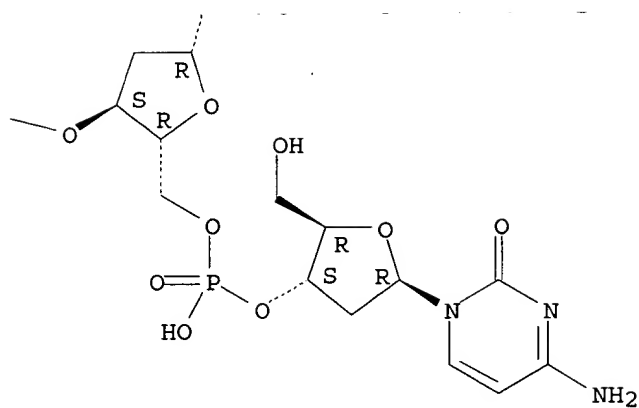
PAGE 1-B



PAGE 2-A



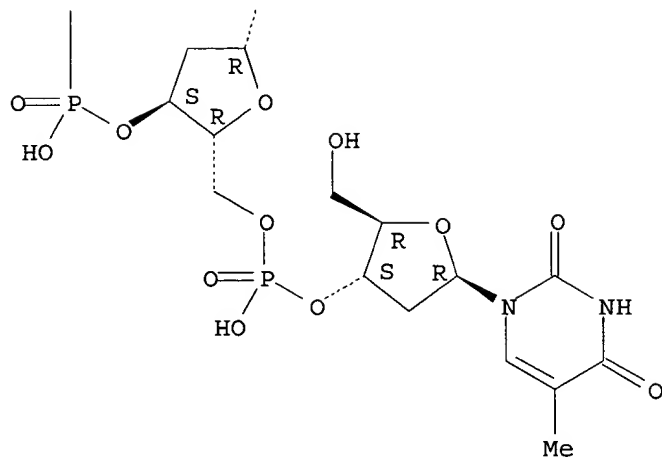
PAGE 2-B



L46 ANSWER 48 OF 53 USPATFULL on STN

Searched by Barb O'Bryen, STIC 2-2518

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CM 2

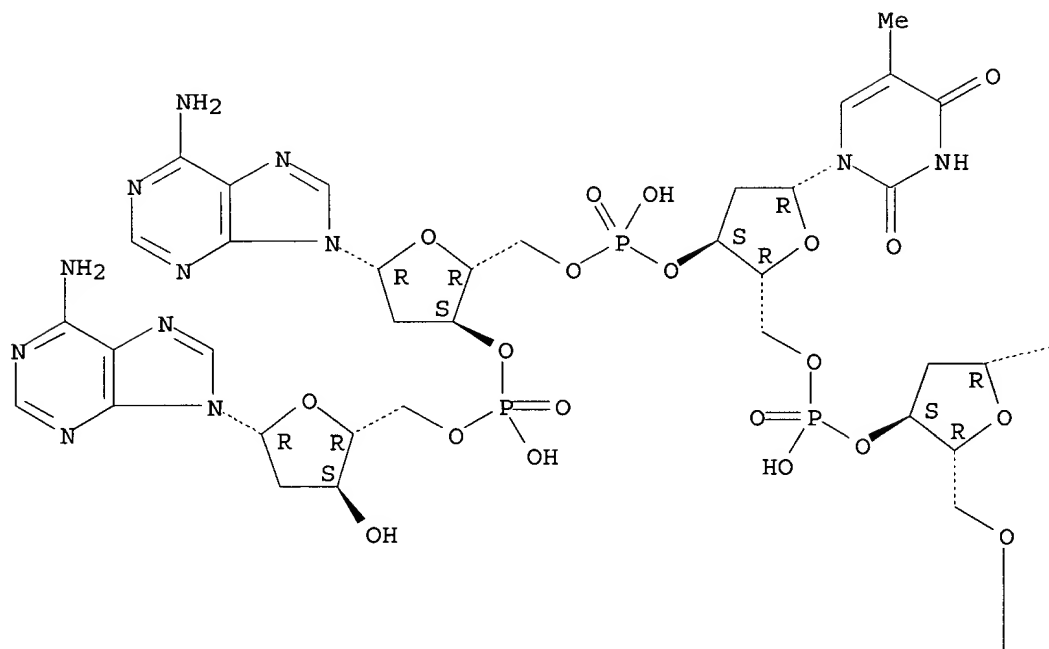
CRN 89802-96-0

CMF C57 H74 N21 O33 P5

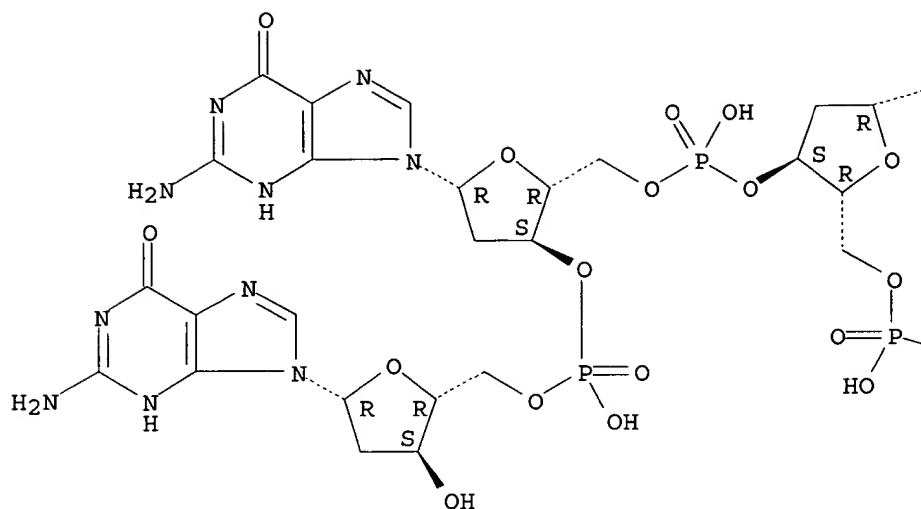
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

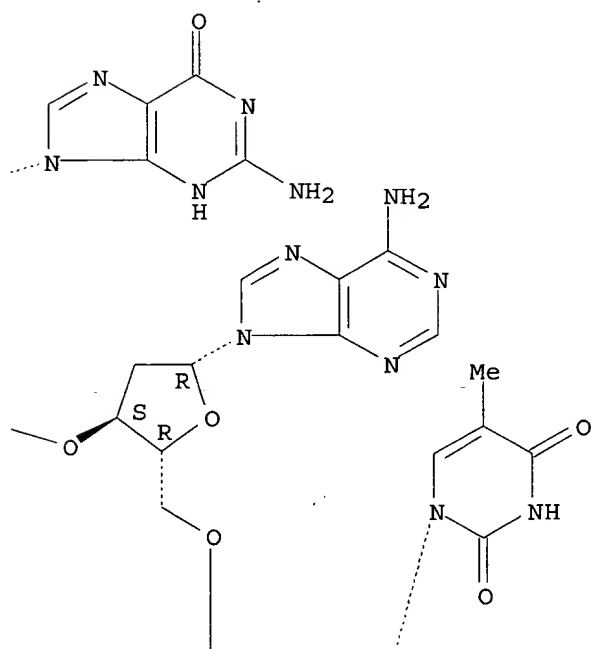
PAGE 1-A



PAGE 1-A



PAGE 1-B



ACCESSION NUMBER: 2000:4631 USPATFULL
 TITLE: RNA component of telomerase
 INVENTOR(S): Andrews, William H., Richmond, CA, United States
 Avilion, Ariel Athena, Shoreham, NY, United States
 Feng, Junli, San Carlos, CA, United States
 Funk, Walter, Union City, CA, United States
 Greider, Carol, Huntington, NY, United States
 Marhuenda, Maria Antonia Blasco, Mill Neck, NY, United States
 Villeponteau, Bryant, San Carlos, CA, United States
 PATENT ASSIGNEE(S): Cold Spring Harbor Laboratory, Cold Spring Harbor, NY,
 United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6013468 | | 20000111 |
| APPLICATION INFO.: | US 1995-520550 | | 19950829 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1995-387524, filed on 13 Feb 1995, now abandoned which is a continuation-in-part of Ser. No. US 1994-330123, filed on 27 Oct 1994, now patented, Pat. No. US 5583016 which is a continuation-in-part of Ser. No. US 1994-272102, filed on 7 Jul 1994, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Horlick, Kenneth R. | | |
| LEGAL REPRESENTATIVE: | Hamilton, Brook, Smith & Reynolds, P.C. | | |
| NUMBER OF CLAIMS: | 31 | | |
| EXEMPLARY CLAIM: | 18 | | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 12 Drawing Page(s) | | |
| LINE COUNT: | 2464 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids comprising the RNA component of a mammalian telomerase are useful as pharmaceutical, therapeutic, and diagnostic reagents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 157961-44-9

(mammalian telomerase RNA component sequences, regulation by oligonucleotides, and uses in gene **therapy** and cancer diagnosis)

RN 157961-44-9 USPATFULL

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

CM 1

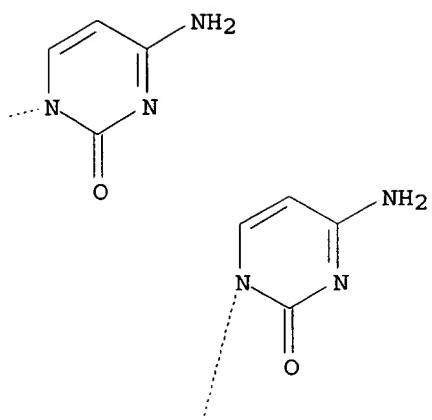
CRN 117490-04-7

CMF C60 H75 N24 O35 P5

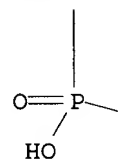
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

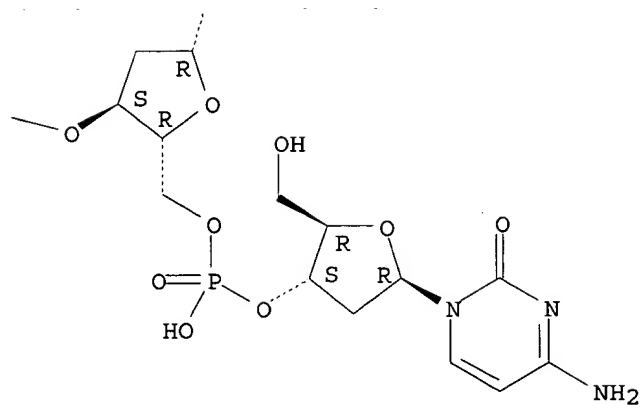
PAGE 1-B



PAGE 2-A



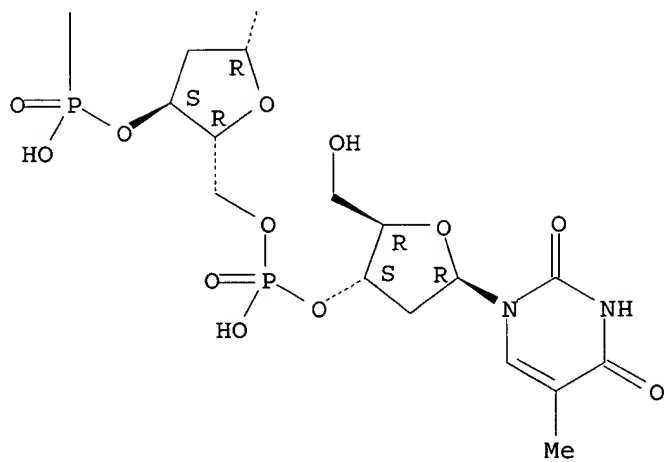
PAGE 2-B



L46 ANSWER 47 OF 53 USPATFULL on STN

Searched by Barb O'Bryen, STIC 2-2518

PAGE 2-B



CM 2

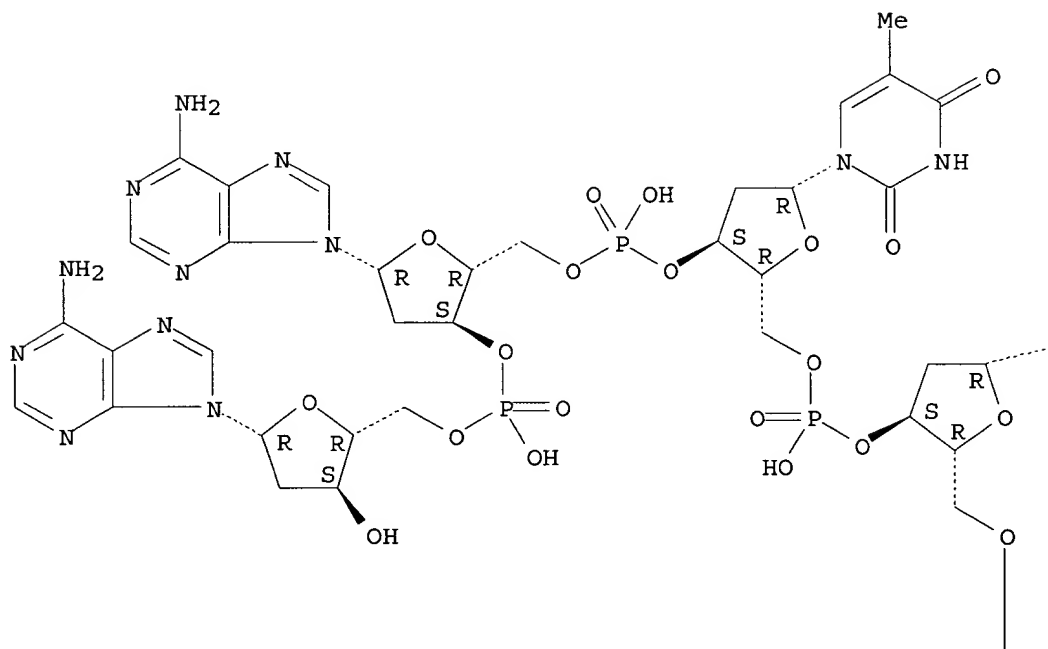
CRN 89802-96-0

CMF C57 H74 N21 O33 P5

CDES 5:ALL,B-D-ERYTHRO

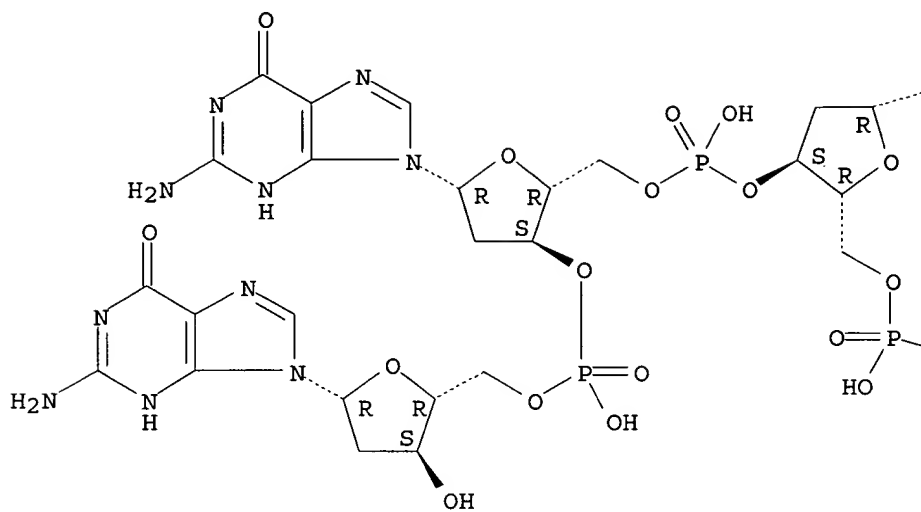
Absolute stereochemistry.

PAGE 1-A

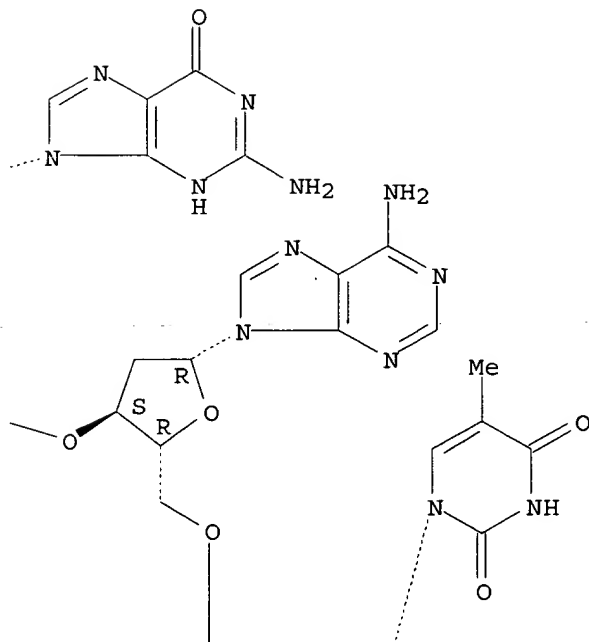


Absolute stereochemistry.

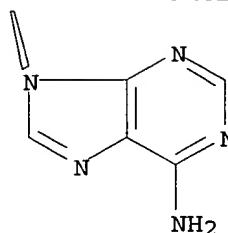
PAGE 1-A



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PAGE 3-A



L46 ANSWER 46 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2000:50825 USPATFULL
 TITLE: Mammalian telomerase RNA gene promoter
 INVENTOR(S): Villeponteau, Bryant, San Carlos, CA, United States
 Feng, Junli, San Carlos, CA, United States
 Funk, Walter, Union City, CA, United States
 Andrews, William H., Richmond, CA, United States
 PATENT ASSIGNEE(S): Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6054575 | | 20000425 |
| APPLICATION INFO.: | US 1997-998443 | | 19971224 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1996-660678, filed on 5 Jun 1996, now patented, Pat. No. US 5837857 which is a continuation of Ser. No. US 1994-330123, filed on 27 Oct 1994, now patented, Pat. No. US 5583016 which is a continuation-in-part of Ser. No. US 1994-272102, filed on 7 Jul 1994, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Houteman, Scott W. | | |
| LEGAL REPRESENTATIVE: | Kaster, Kevin R., Collins, Amy L., Parent, Annette S. | | |
| NUMBER OF CLAIMS: | 20 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 1575 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids comprising the RNA component of a mammalian telomerase are useful as pharmaceutical, therapeutic, and diagnostic reagents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 157961-44-9

(mammalian telomerase RNA component sequences, regulation by oligonucleotides, and uses in gene therapy and cancer diagnosis)

RN 157961-44-9 USPATFULL

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

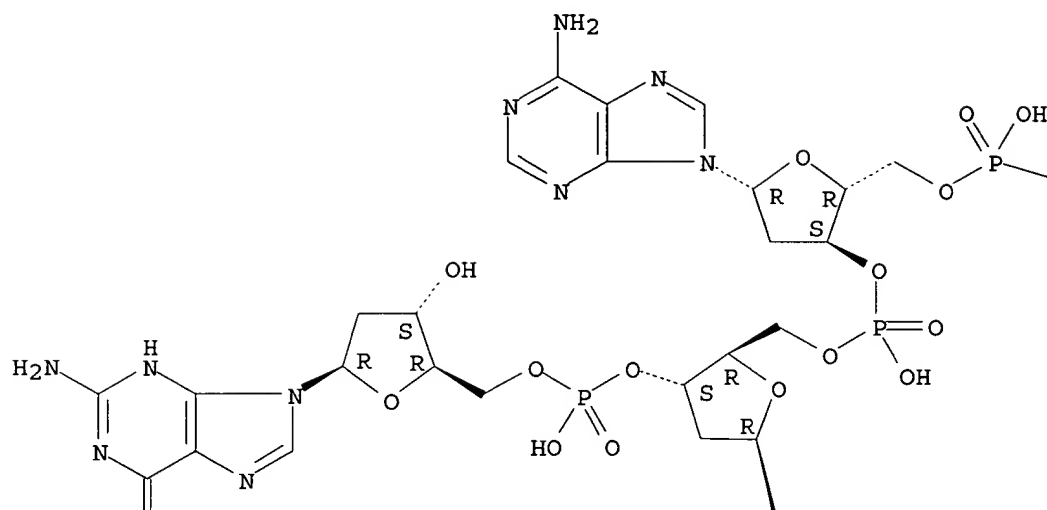
CM 1

CRN 117490-04-7

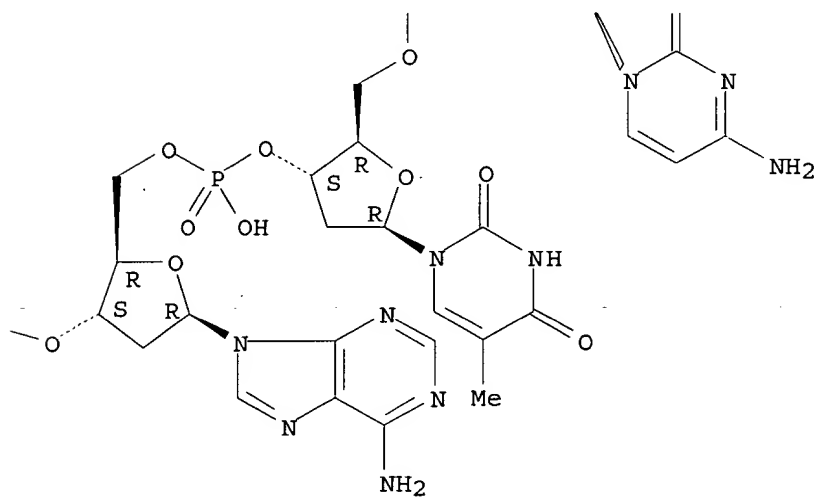
CMF C60 H75 N24 O35 P5

CDES 5:ALL,B-D-ERYTHRO

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PAGE 2-B



or peptides encoded by the nucleic acid sequences of the invention and isolated proteins and peptides which comprise at least a portion of a novel B lymphocyte antigen. Proteins and peptides described herein can be administered to subjects to enhance or suppress T cell-mediated immune responses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **257280-30-1**

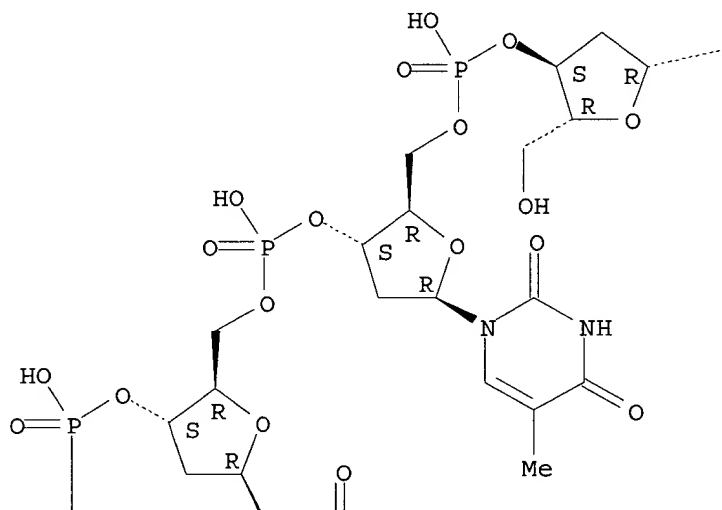
(unclaimed sequence; cTLA4/CD28 ligands and uses therefor)

RN 257280-30-1 USPATFULL

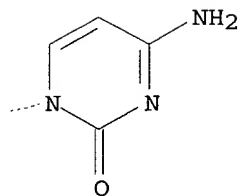
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

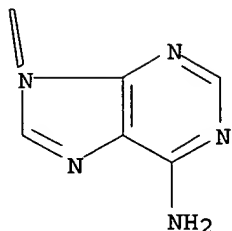
PAGE 1-B



PAGE 1-C



PAGE 3-B



L46 ANSWER 45 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2000:84403 USPATFULL
 TITLE: CTLA4/CD28 ligands and uses therefor
 INVENTOR(S): Freeman, Gordon J., Brookline, MA, United States
 Nadler, Lee M., Newton, MA, United States
 Gray, Gary S., Brookline, MA, United States
 PATENT ASSIGNEE(S): Dana-Farber Cancer Institute, Boston, MA, United States
 (U.S. corporation)
 Genetics Institute, Inc., Cambridge, MA, United States
 (U.S. corporation)

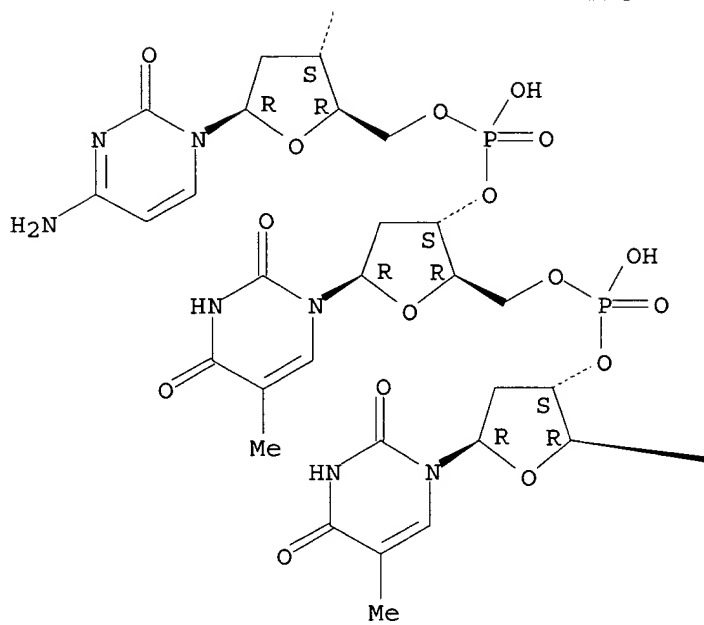
| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6084067 | | 20000704 |
| APPLICATION INFO.: | US 1995-479744 | | 19950607 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1993-147773, filed on 3 Nov 1993, now abandoned And Ser. No. US 1994-280757, filed on 26 Jul 1994 which is a continuation-in-part of Ser. No. US 1993-109393, filed on 19 Aug 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-101624, filed on 26 Jul 1993 | | |

| | NUMBER | DATE |
|-----------------------|---|----------|
| PRIORITY INFORMATION: | WO 1994-US8423 | 19940726 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Benzion, Gary | |
| ASSISTANT EXAMINER: | Nelson, Amy J. | |
| LEGAL REPRESENTATIVE: | Lahive & Cockfield, LLP, Mandragouras, Amy E., Williams, Megan E. | |
| NUMBER OF CLAIMS: | 8 | |
| EXEMPLARY CLAIM: | 1,2 | |
| NUMBER OF DRAWINGS: | 47 Drawing Figure(s); 33 Drawing Page(s) | |
| LINE COUNT: | 5133 | |

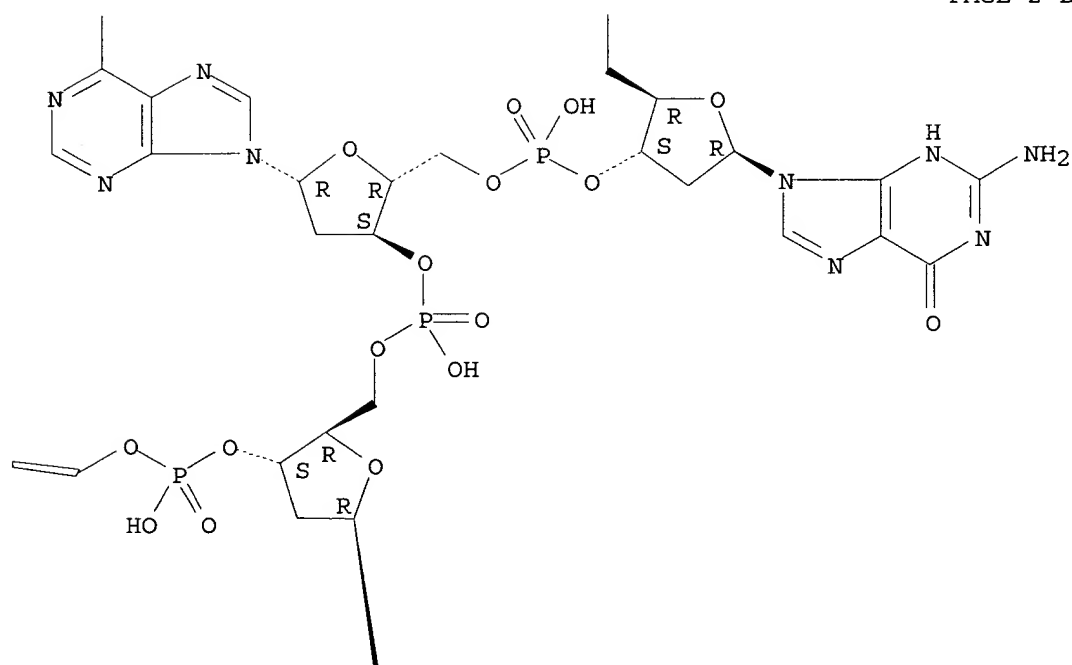
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids encoding novel CTLA4/CD28 ligands which costimulate T cell activation are disclosed. In one embodiment, the nucleic acid has a sequence which encodes a B lymphocyte antigen, B7-2. Preferably, the nucleic acid is a DNA molecule comprising at least a portion of a nucleotide sequence shown in FIG. 8, SEQ ID NO:1 or FIG. 14, SEQ ID NO:23. The nucleic acid sequences of the invention can be integrated into various expression vectors, which in turn direct the synthesis of the corresponding proteins or peptides in a variety of hosts, particularly eukaryotic cells, such as mammalian and insect cell culture. Also disclosed are host cells transformed to produce proteins

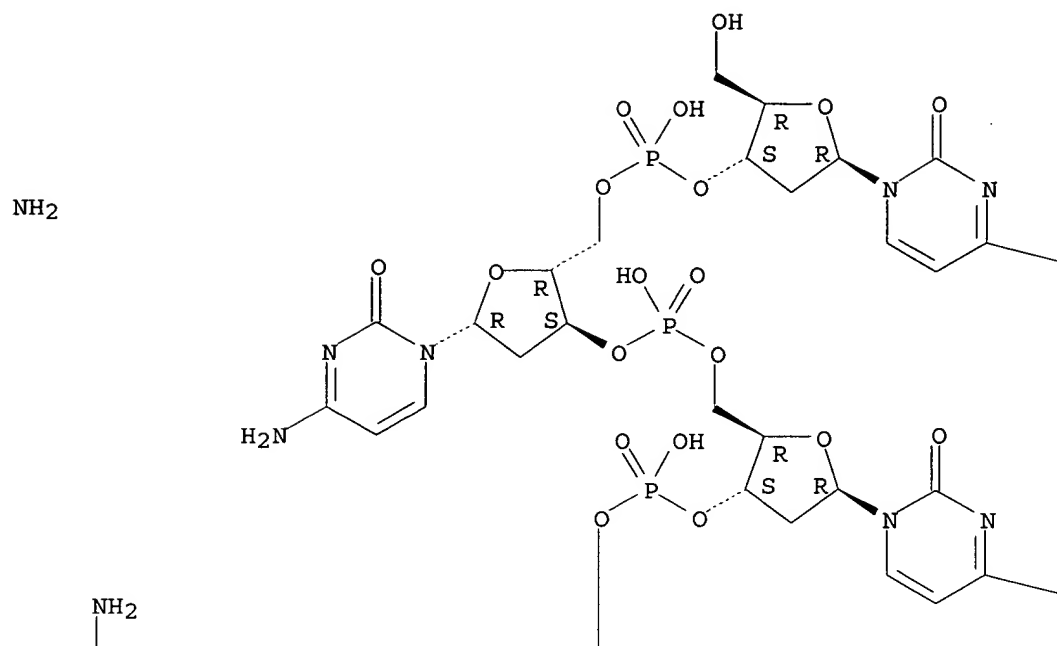
PAGE 2-A



PAGE 2-B



PAGE 1-B



PAGE 1-C

NH₂

NH₂

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel neurotrophic factor referred to as glial cell line-derived neurotrophic factor (GDNF) has been identified and isolated from serum free growth conditioned medium of B49 glioblastoma cells. Rat and human genes encoding GDNF have been cloned and sequenced. A gene encoding GDNF has been subcloned into a vector, and the vector has been used to transform a host cell in order to produce biologically active GDNF in a recombinant DNA process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 96492-36-3

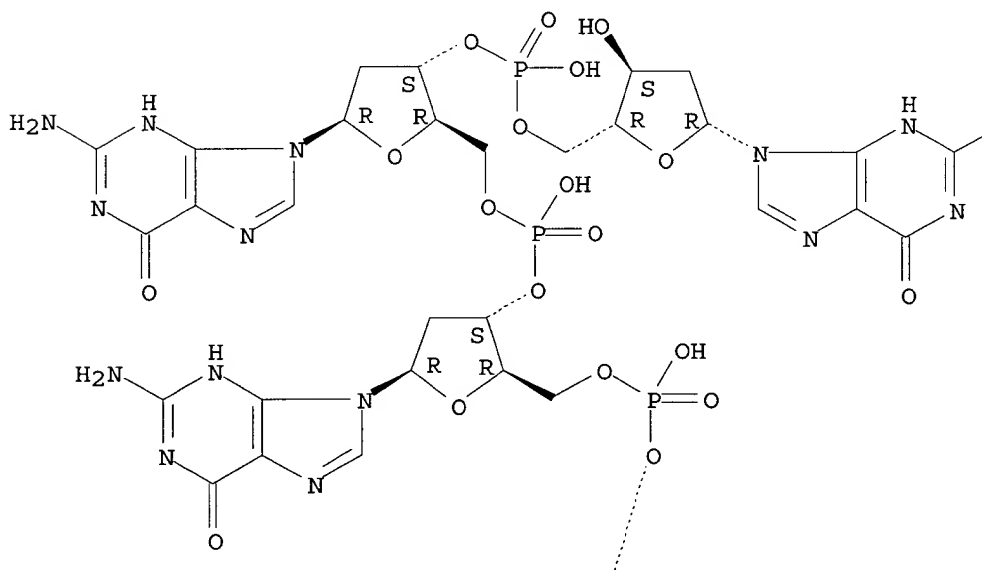
(unclaimed nucleotide sequence; cloning of, **therapeutic** use in nerve related diseases, and antibodies to glial cell line-derived neurotrophic factor)

RN 96492-36-3 USPATFULL

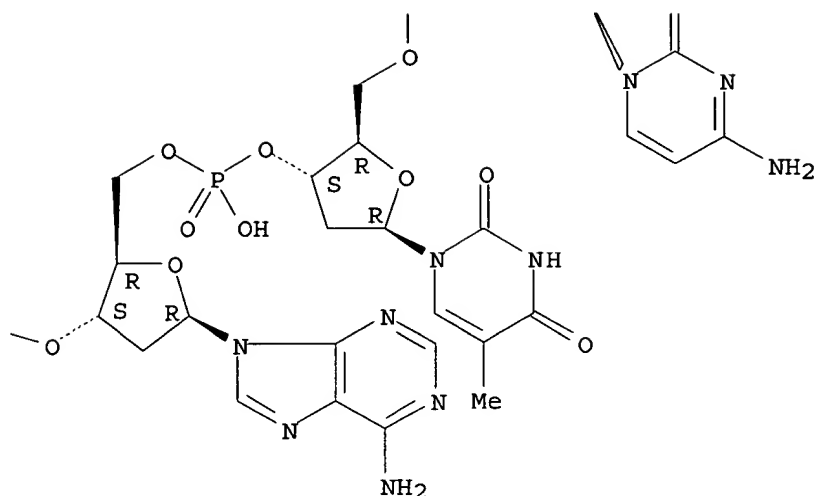
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

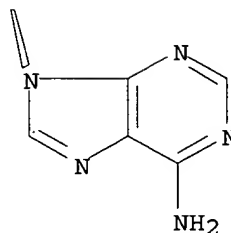
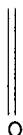
PAGE 1-A



PAGE 2-B



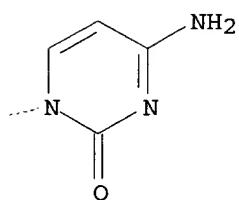
PAGE 3-A



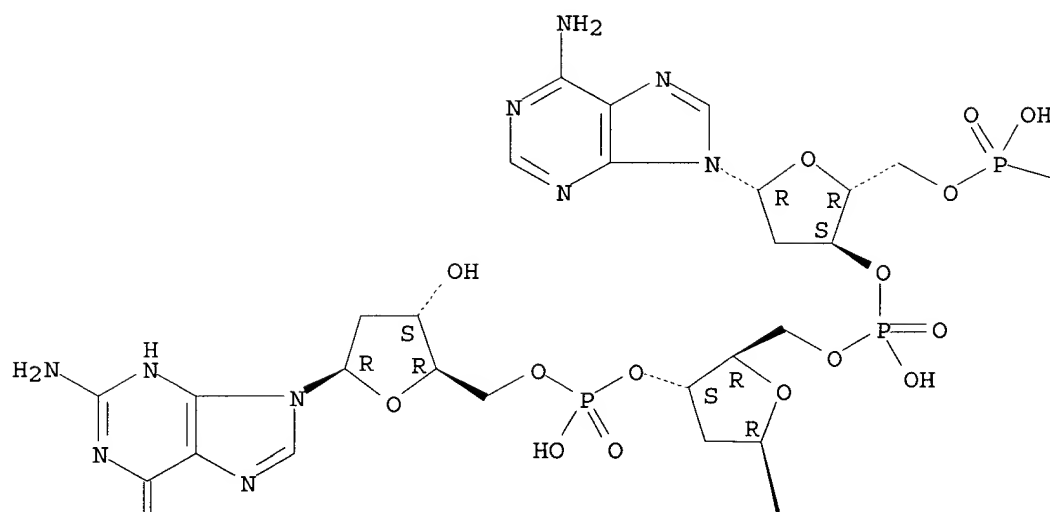
L46 ANSWER 44 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2000:95101 USPATFULL
 TITLE: Glial cell line-derived neurotrophic factor
 INVENTOR(S): Lin, Leu-Fen H., Boulder, CO, United States
 Collins, Franklin D., Agoura Hills, CA, United States
 Doherty, Daniel H., Boulder, CO, United States
 Lile, Jack, Nederland, CO, United States
 Bektesh, Susan, Boulder, CO, United States
 PATENT ASSIGNEE(S): Amgen Inc., Thousand Oaks, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6093802 | | 20000725 |
| APPLICATION INFO.: | US 1995-451374 | | 19950526 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 182183 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Schain, Howard E. | | |
| LEGAL REPRESENTATIVE: | Curry, Daniel R., Levy, Ron K., Odre, Steven M. | | |
| NUMBER OF CLAIMS: | 11 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 37 Drawing Figure(s); 31 Drawing Page(s) | | |
| LINE COUNT: | 3240 | | |

PAGE 1-C



PAGE 2-A



NO:23. The nucleic acid sequences of the invention can be integrated into various expression vectors, which in turn direct the synthesis of the corresponding proteins or peptides in a variety of hosts, particularly eukaryotic cells, such as mammalian and insect cell culture. Also disclosed are host cells transformed to produce proteins or peptides encoded by the nucleic acid sequences of the invention and isolated proteins and peptides which comprise at least a portion of a novel B lymphocyte antigen. Proteins and peptides described herein can be administered to subjects to enhance or suppress T cell-mediated immune responses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 257280-30-1

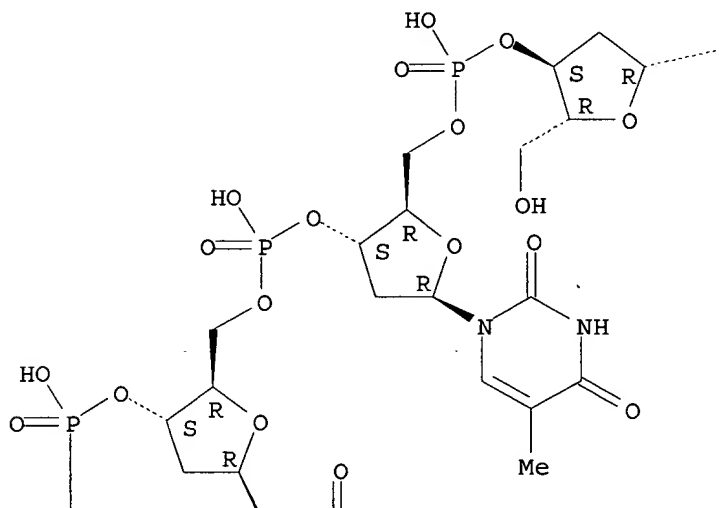
(unclaimed sequence; fusion proteins of novel CTLA4/CD28 ligands and uses therefore)

RN 257280-30-1 USPTAFULL

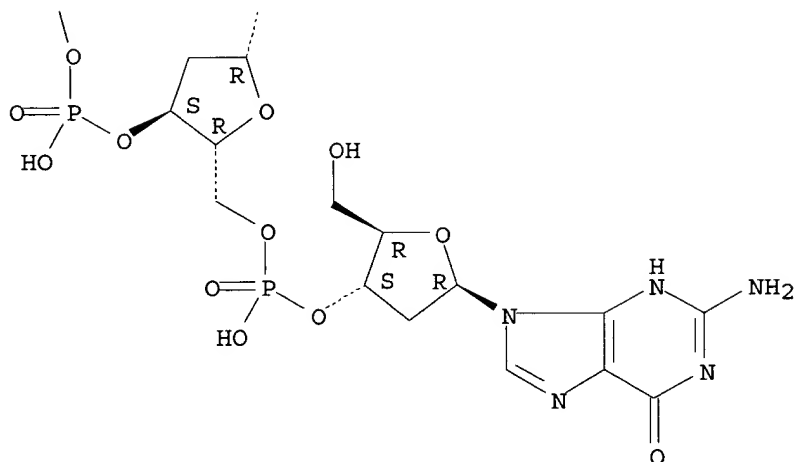
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B



PAGE 2-B



L46 ANSWER 43 OF 53 USPATFULL on STN

ACCESSION NUMBER: 2000:134983 USPATFULL

TITLE: Fusion proteins of novel CTLA4/CD28 ligands and uses therefore

INVENTOR(S): Freeman, Gordon J., Brookline, MA, United States

Nadler, Lee M., Newton, MA, United States

Gray, Gary S., Brookline, MA, United States

Greenfield, Edward, Randolph, MA, United States

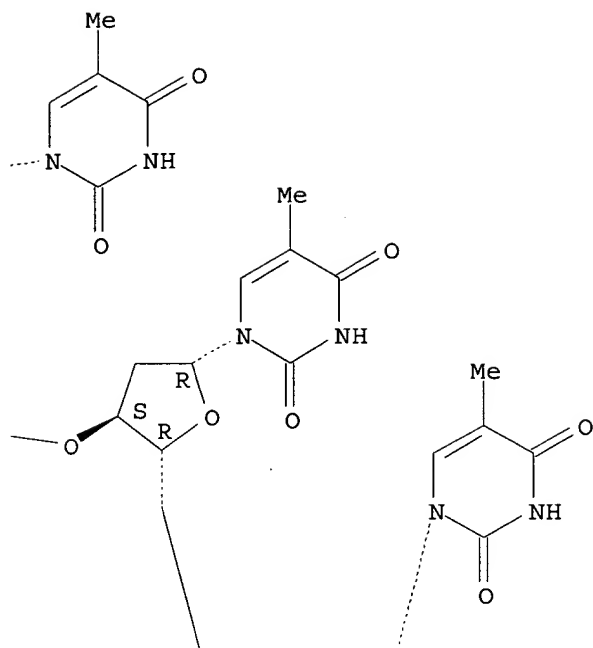
PATENT ASSIGNEE(S): Dana Farber Cancer Institute, Boston, MA, United States
(U.S. corporation)
Repligen Corporation, Cambridge, MA, United States
(U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6130316 | | 20001010 |
| APPLICATION INFO.: | US 1994-280757 | | 19940726 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1993-109393, filed on 19 Aug 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-101624, filed on 26 Jul 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-147773, filed on 3 Nov 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Spector, Lorraine | | |
| LEGAL REPRESENTATIVE: | Lahive & Cockfield LLP, Mandragouras, Amy E., Williams, Megan E. | | |
| NUMBER OF CLAIMS: | 69 | | |
| EXEMPLARY CLAIM: | 1,23 | | |
| NUMBER OF DRAWINGS: | 35 Drawing Figure(s); 26 Drawing Page(s) | | |
| LINE COUNT: | 4973 | | |

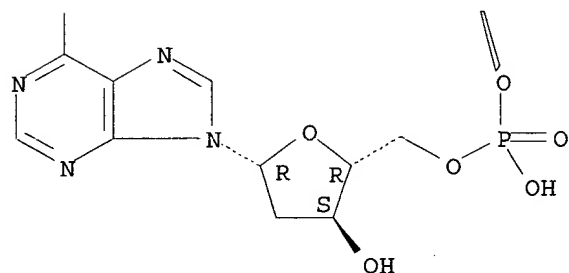
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acids encoding novel CTLA4/CD28 ligands which costimulate T cell activation are disclosed. In one embodiment, the nucleic acid has a sequence which encodes a B lymphocyte antigen, B7-2. Preferably, the nucleic acid is a DNA molecule comprising at least a portion of a nucleotide sequence shown in FIG. 8, SEQ ID NO:1 or FIG. 14, SEQ ID

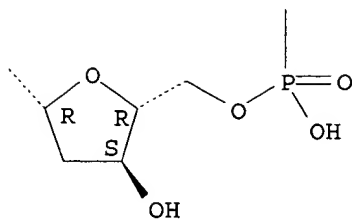
PAGE 1-B



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CM 2

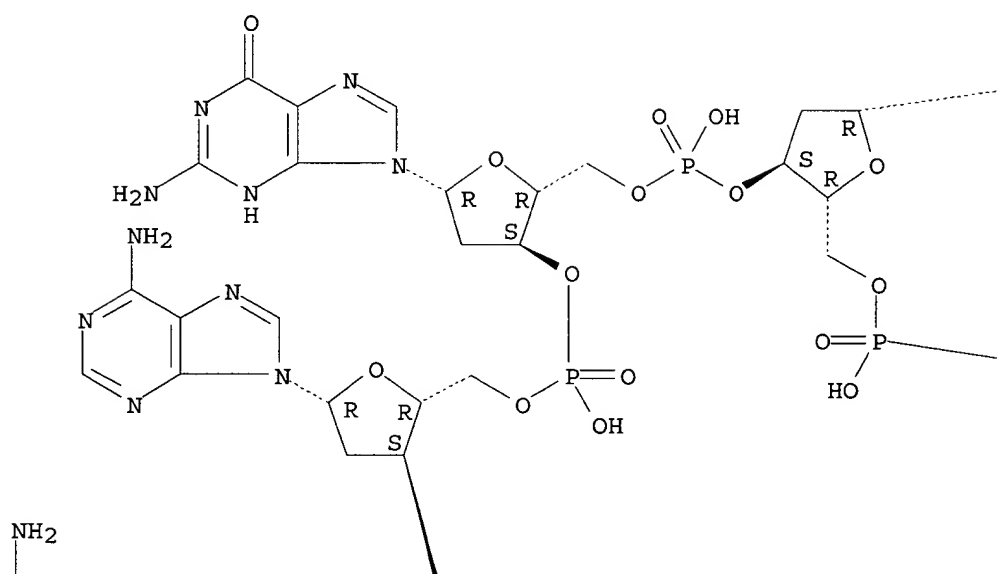
CRN 177792-81-3

CMF C70 H88 N26 O41 P6

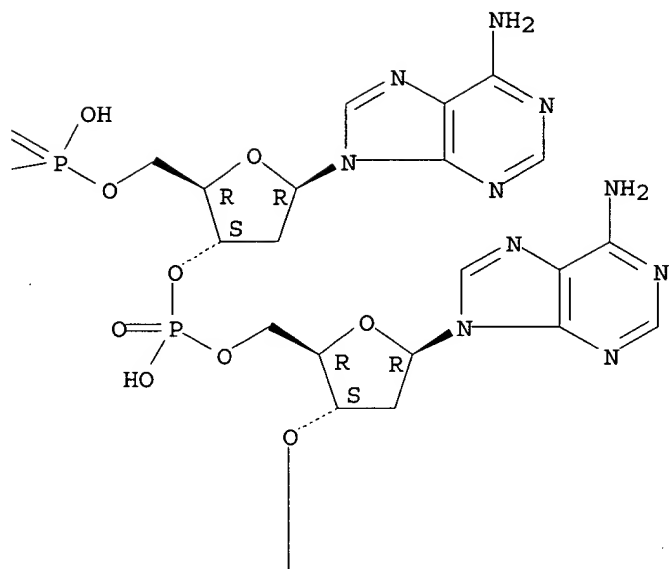
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

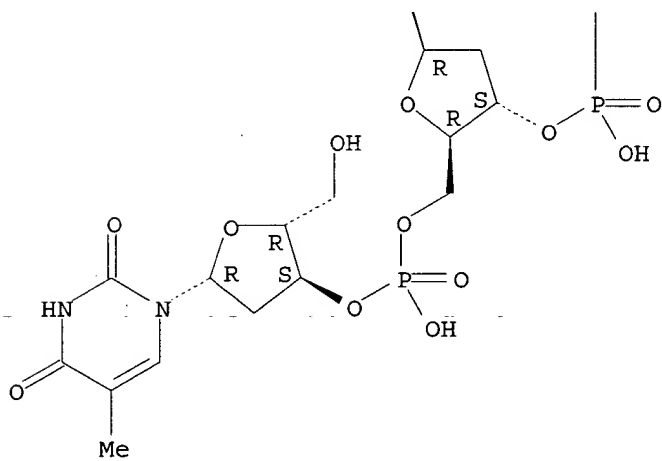
PAGE 1-A



PAGE 1-B



PAGE 2-A



CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 177792-83-5

(CHR element of cdc25C gene; genetic **therapy** of diseases caused by immune system using genetic construct regulated in cell- or virus-specific, cell cycle-dependent manner)

RN 177792-83-5 USPATFULL

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

CM 1

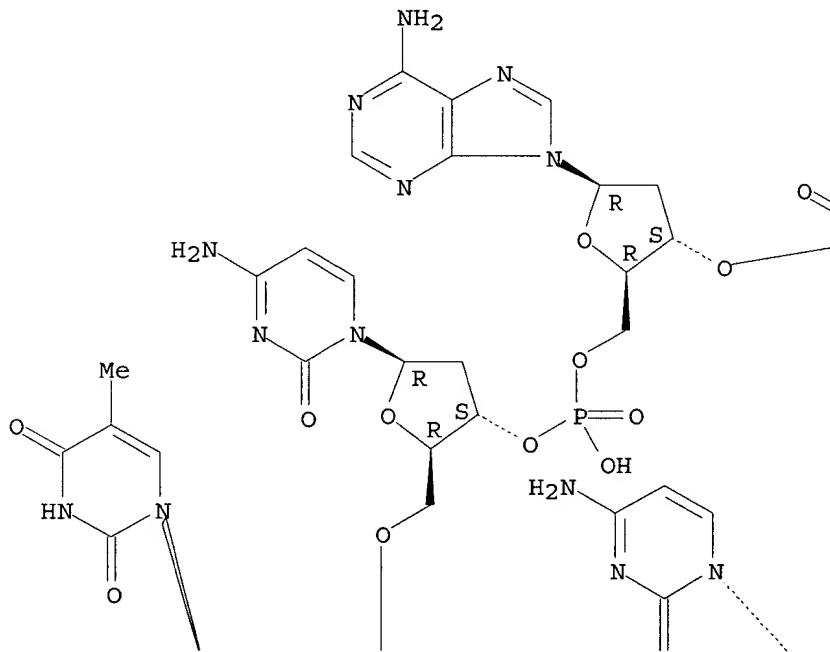
CRN 177792-82-4

CMF C68 H87 N25 O39 P6

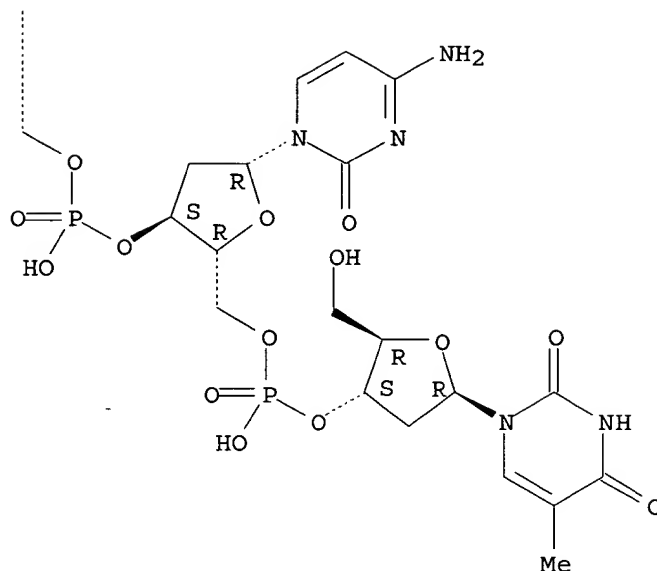
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 1-A



PAGE 2-B



L46 ANSWER 42 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2001:51838 USPATFULL
 TITLE: Cell cycle regulated repressor and DNA element
 INVENTOR(S): Muller, Rolf, Marburg, Germany, Federal Republic of
 PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany, Federal Republic of (non-U.S. corporation)

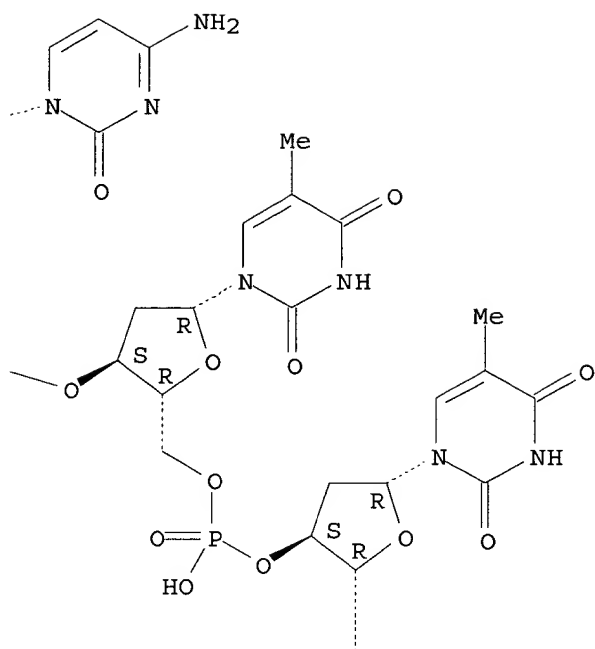
| | NUMBER | KIND | DATE |
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| PATENT INFORMATION: | US 6214614 | B1 | 20010410 |
| | WO 9606943 | | 19960307 |
| APPLICATION INFO.: | US 1997-793660 | | 19970909 (8) |
| | WO 1995-GB2000 | | 19950823 |
| | | | 19970909 PCT 371 date |
| | | | 19970909 PCT 102(e) date |

| | NUMBER | DATE |
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| PRIORITY INFORMATION: | GB 1994-17366 | 19940826 |
| | GB 1995-6466 | 19950329 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Schwartzman, Robert A. | |
| LEGAL REPRESENTATIVE: | Dike, Bronstein, Roberts & Cushman, LLP, Conlin, David G., Lowen, Cara Z. | |
| NUMBER OF CLAIMS: | 9 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 23 Drawing Figure(s); 16 Drawing Page(s) | |
| LINE COUNT: | 1113 | |

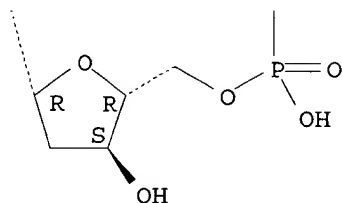
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a cell cycle regulated repressor protein which binds to a DNA element present in the control sequences of the human cdc25C gene and other cell cycle regulated genes, as well as the use thereof in cell cycle regulated expression systems.

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NUMBER OF CLAIMS: 49
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 19 Drawing Figure(s); 19 Drawing Page(s)
 LINE COUNT: 3249

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleic acid sequences containing unmethylated CpG dinucleotides that modulate an immune response including stimulating a Th1 pattern of immune activation, cytokine production, NK lytic activity, and B cell proliferation are disclosed. The sequences are also useful a synthetic adjuvant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 207496-45-5

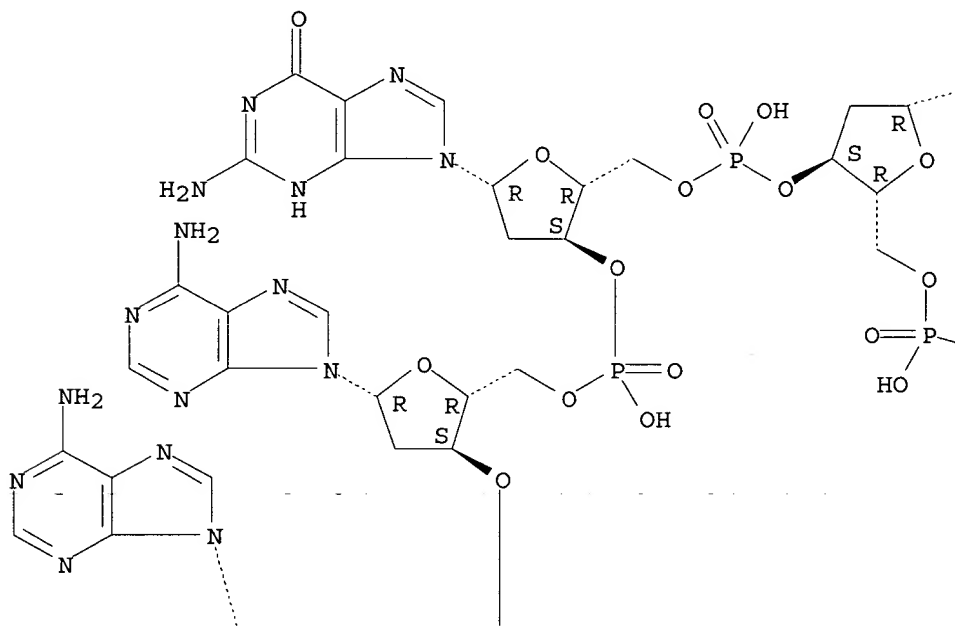
(unclaimed sequence; **immunostimulatory** nucleic acid mols.)

RN 207496-45-5 USPATFULL

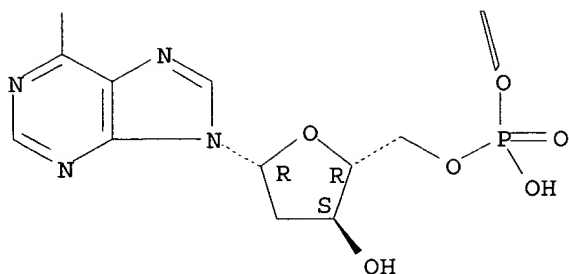
CN Adenosine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

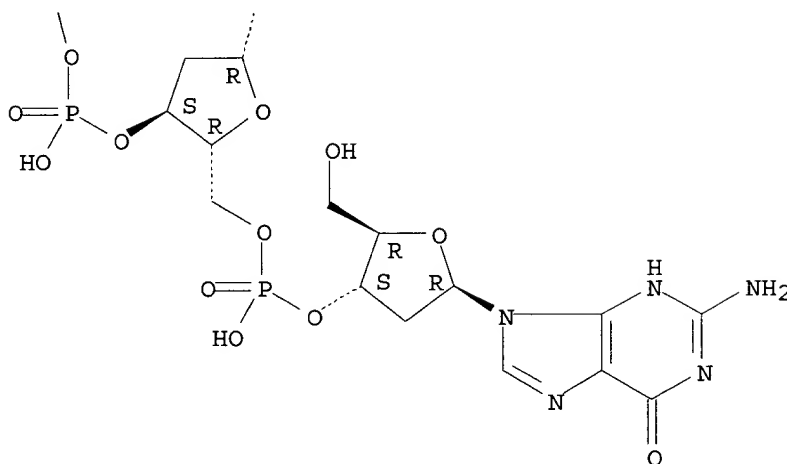
PAGE 1-A



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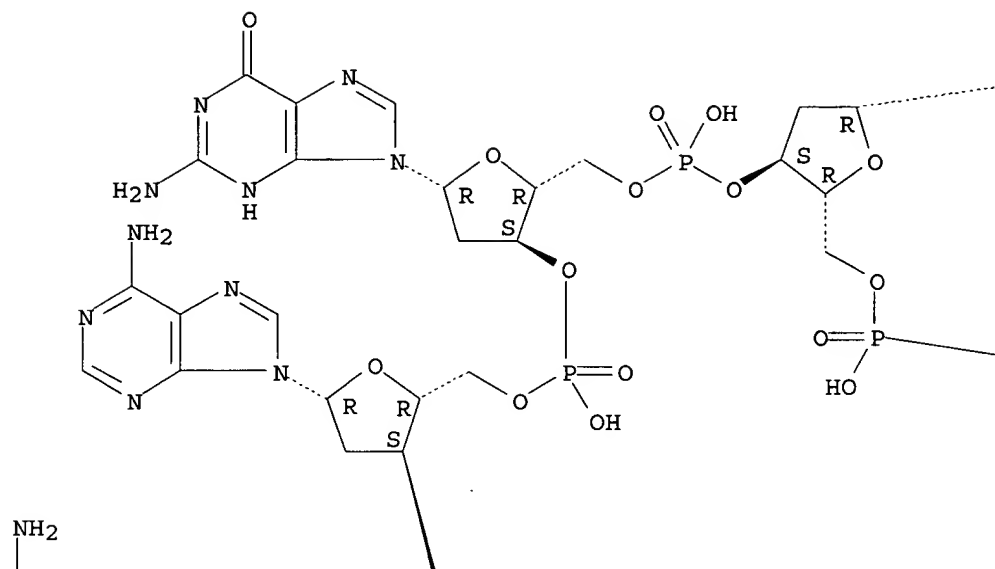
PAGE 2-B



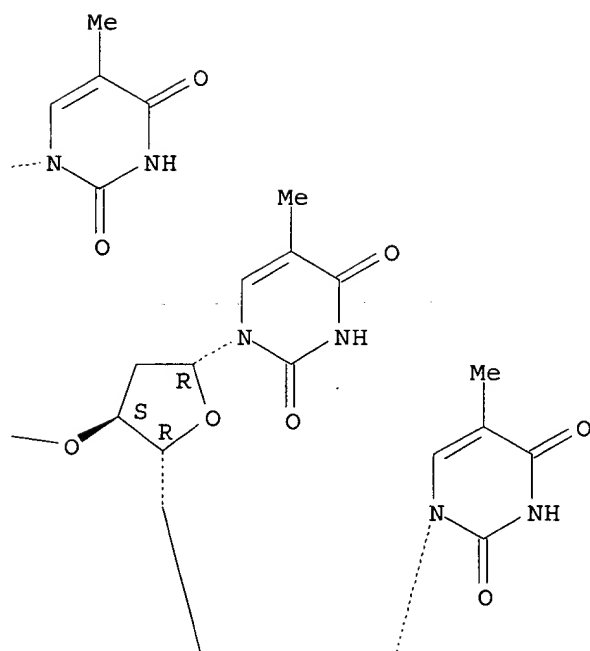
L46 ANSWER 41 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2001:79141 USPATFULL
 TITLE: Immunostimulatory nucleic acid molecules
 INVENTOR(S): Krieg, Arthur M., Iowa City, IA, United States
 Kline, Joel N., Iowa City, IA, United States
 PATENT ASSIGNEE(S): University of Iowa Research Foundation, Iowa City, IA,
 United States (U.S. corporation)
 Coley Pharmaceutical Group, Inc., Wellesley, MA, United
 States (U.S. corporation)
 The United States of America as represented by the
 Department of Health and Human Services, Washington,
 DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6239116 | B1 | 20010529 |
| APPLICATION INFO.: | US 1997-960774 | | 19971030 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1996-738652, filed on 30 Oct 1996 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Martinell, James | | |
| LEGAL REPRESENTATIVE: | Wolf, Greenfield & Sacks, P.C. | | |

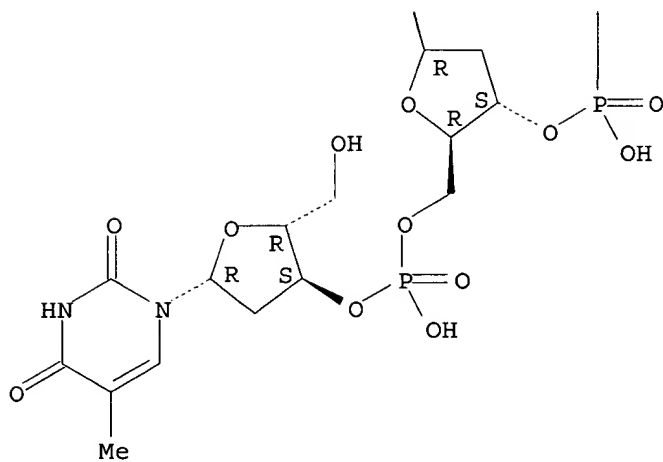
PAGE 1-A



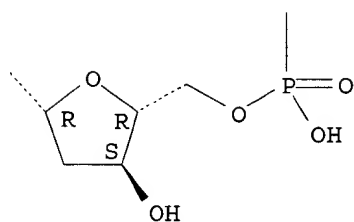
PAGE 1-B



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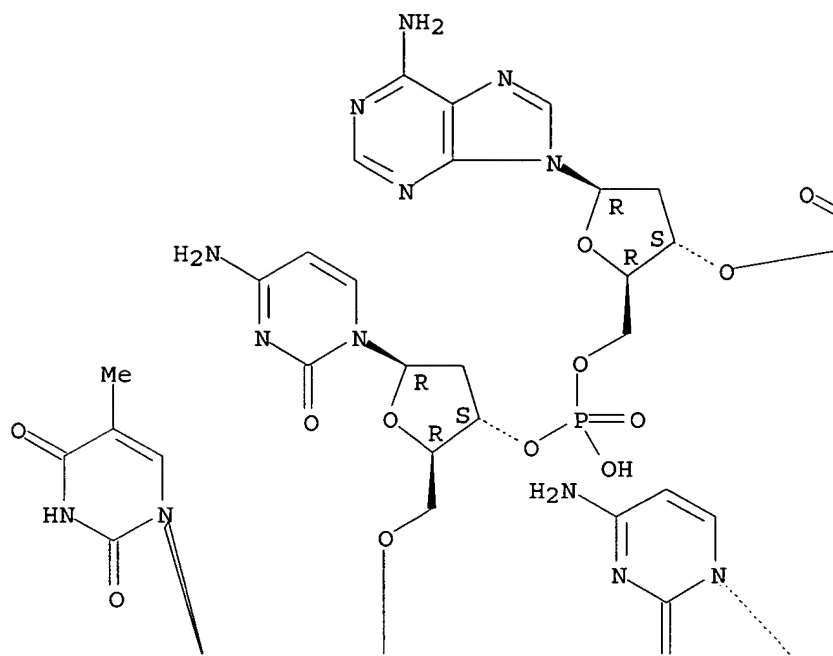


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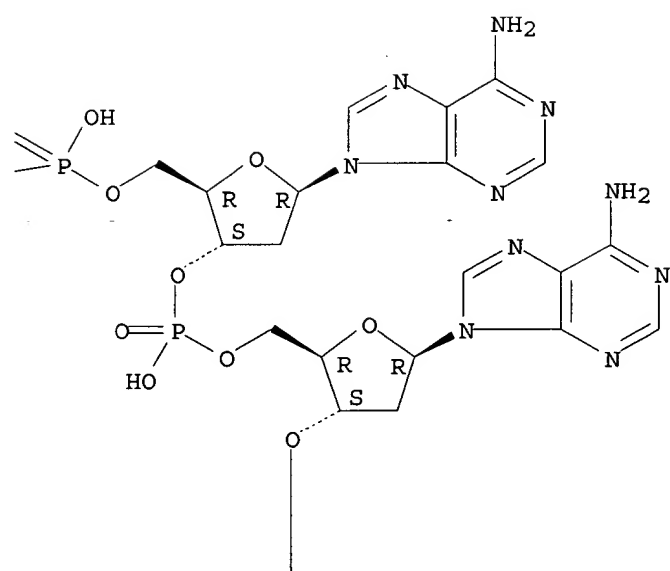
CRN 177792-81-3
CMF C70 H88 N26 O41 P6
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Priebe, Scott D.
LEGAL REPRESENTATIVE: Heller Ehrman White & McAuliffe
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 779

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A DNA sequence is disclosed for the genetic therapy of diseases of the central nervous system. The essential components for the DNA sequence are the activator sequence, the promoter module, and the active substance coding gene. The activator sequence is specifically activated in activated endothelial or glial cells. Activation is cell cycle-regulated by the promoter module. The active substance represents an inhibitor of the nerve growth factor, a dopanine metabolism enzyme, and/or a nerve cell protection factor. The disclosed DNA sequence is inserted into a viral or non-viral vector, supplemented with a ligand with affinity for the target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 177792-83-5

(CHR element of cdc25C gene; genetic **therapy** of diseases caused by immune system using genetic construct regulated in cell- or virus-specific, cell cycle-dependent manner)

RN 177792-83-5 USPATFULL

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

CM 1

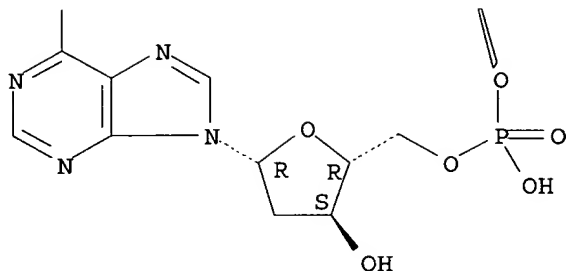
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CMF C68 H87 N25 O39 P6

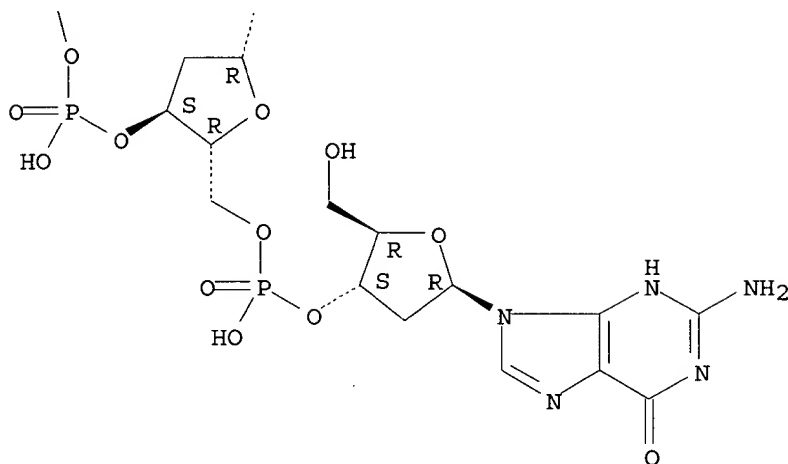
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 2-A



PAGE 2-B

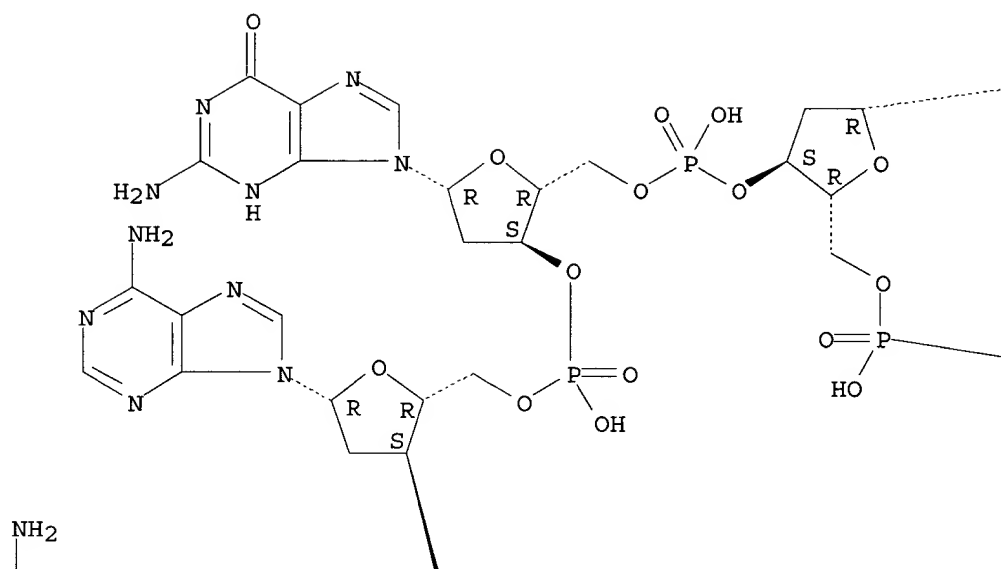


L46 ANSWER 40 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2002:57592 USPATFULL
 TITLE: DNA for expression under control of a cell
 cycle-dependent promoter
 INVENTOR(S): Sedlacek, Hans-Harald, Marburg, GERMANY, FEDERAL
 REPUBLIC OF
 PATENT ASSIGNEE(S): Muller, Rolf, Marburg, GERMANY, FEDERAL REPUBLIC OF
 Aventis Pharma Deutschland GmbH, Frankfurt, GERMANY,
 FEDERAL REPUBLIC OF (non-U.S. corporation)

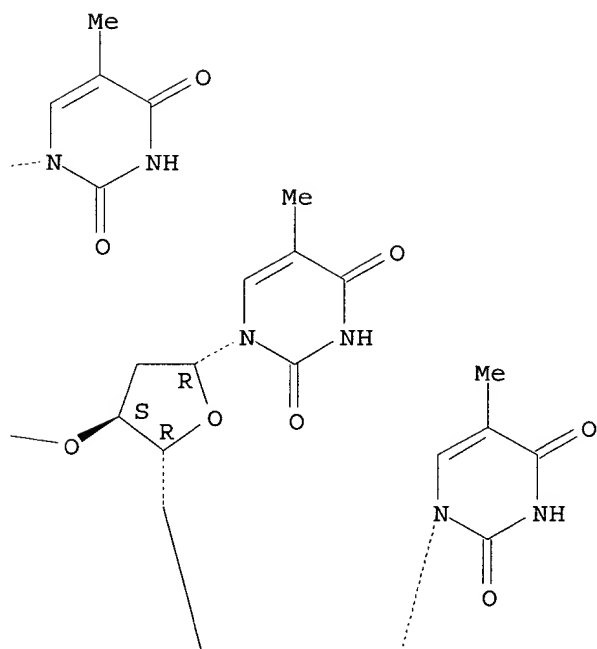
| | NUMBER | KIND | DATE |
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| PATENT INFORMATION: | US 6358732 | B1 | 20020319 |
| | WO 9606939 | | 19960307 |
| APPLICATION INFO.: | US 1997-793110 | | 19970425 (8) |
| | WO 1995-EP3369 | | 19950825 |
| | | | 19970425 PCT 371 date |

| | NUMBER | DATE |
|-----------------------|---------------|----------|
| PRIORITY INFORMATION: | GB 1994-17366 | 19940826 |
| | GB 1995-6466 | 19950329 |
| DOCUMENT TYPE: | Utility | |

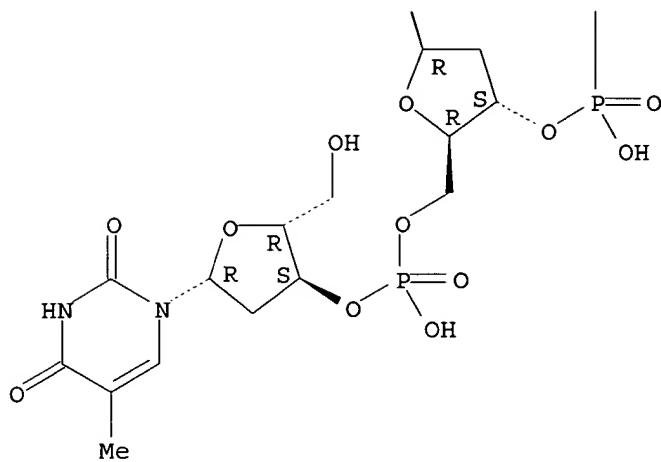
PAGE 1-A



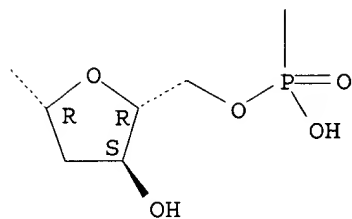
PAGE 1-B



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CM 2

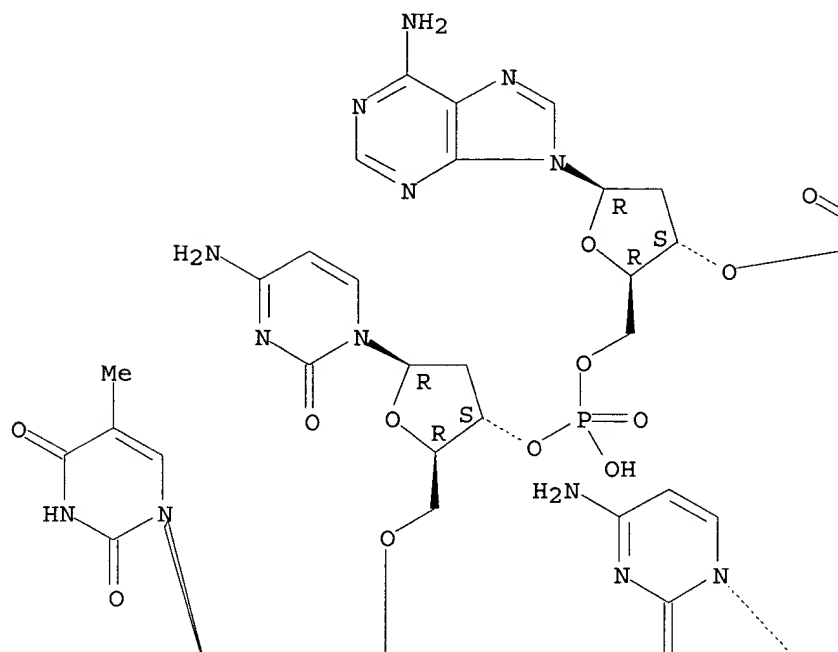
CRN 177792-81-3

CMF C70 H88 N26 O41 P6

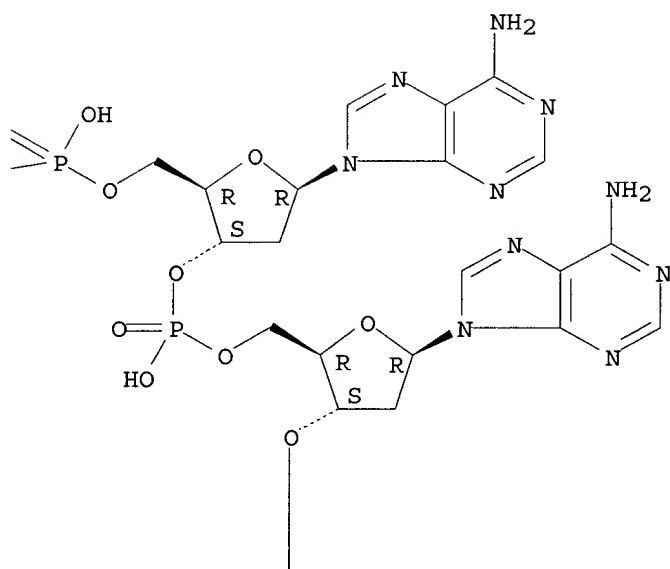
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

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PAGE 1-B



| | NUMBER | DATE |
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| PRIORITY INFORMATION: | GB 1994-17366 | 19940826 |
| | GB 1995-6466 | 19950329 |
| | DE 1995-19524720 | 19950712 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Clark, Deborah J. R. | |
| ASSISTANT EXAMINER: | Baker, Anne-Marie | |
| LEGAL REPRESENTATIVE: | Heller Ehrman White and McAuliffe | |
| NUMBER OF CLAIMS: | 23 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 15 Drawing Figure(s); 15 Drawing Page(s) | |
| LINE COUNT: | 2654 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A DNA sequence is described for the gene therapy of diseases associated with the immune system. In its essential elements, the DNA sequence is composed of an activator sequence, a promoter module and a gene for the active substance. The activator sequence is activated in a cell-specific or virus-specific manner and this activation is regulated by the promoter module in a cell cycle-specific manner. The choice of activator sequence and active substance depends on the indication area. The DNA sequence is inserted into a viral or non-viral vector which is supplemented by a ligand having affinity for the target cell. Depending on the choice of activator sequence and active substance, the following can be treated by administering the DNA sequence: defective formation of blood cells; autoimmune diseases and allergies and, in addition, rejection reactions against transplanted organs; chronic arthritis; viral and parasitic infections and, in addition, prophylaxis of viral, bacterial and parasitic infections; and leukemias.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 177792-83-5

(CHR element of cdc25C gene; genetic **therapy** of diseases caused by immune system using genetic construct regulated in cell- or virus-specific, cell cycle-dependent manner)

RN 177792-83-5 USPATFULL

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

CM 1

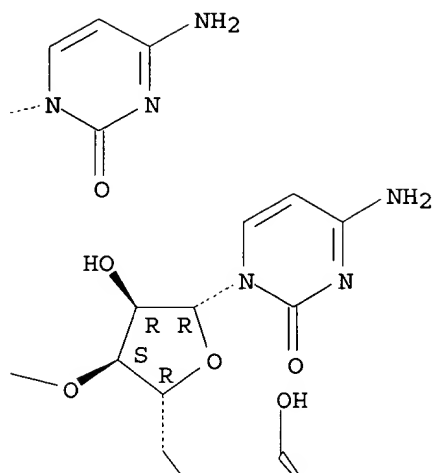
CRN 177792-82-4

CMF C68 H87 N25 O39 P6

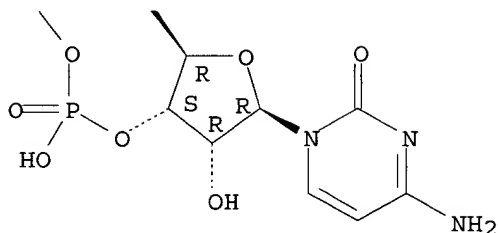
CDES 5:ALL,B-D-ERYTHRO

Absolute stereochemistry.

PAGE 1-B



PAGE 2-B



L46 ANSWER 39 OF 53 USPATFULL on STN

ACCESSION NUMBER: 2002:102621 USPATFULL

TITLE: Cell-specific active compounds regulated by the cell cycle

INVENTOR(S): Sedlacek, Hans-Harald, Marburg, GERMANY, FEDERAL REPUBLIC OF

PATENT ASSIGNEE(S): Muller, Rolf, Marburg, GERMANY, FEDERAL REPUBLIC OF
Hoechst Aktiengesellschaft, Frankfurt am Main, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|-----------------------|
| PATENT INFORMATION: | US 6384202 | B1 | 20020507 |
| | WO 9606941 | | 19960307 |
| APPLICATION INFO.: | US 1997-793109 | | 19970425 (8) |
| | WO 1995-EP3371 | | 19950825 |
| | | | 19970425 PCT 371 date |

ASSISTANT EXAMINER: Walicka, Malgorzata A
 LEGAL REPRESENTATIVE: Clark & Elbing LLP
 NUMBER OF CLAIMS: 4
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
 LINE COUNT: 429

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An artificial mammalian chromosome, more specifically, a clone containing a mammalian centromere sequence and a DNA replication origin with mammalian telomere sequences added to both ends of the clone, is provided by preparing a CEPH artificial yeast chromosome library containing a human genome, identifying clones having a repetitive human alphoid sequence from this library, and further preparing a yeast strain in which mammalian telomere sequences are added to the ends of its chromosome.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 204643-99-2P

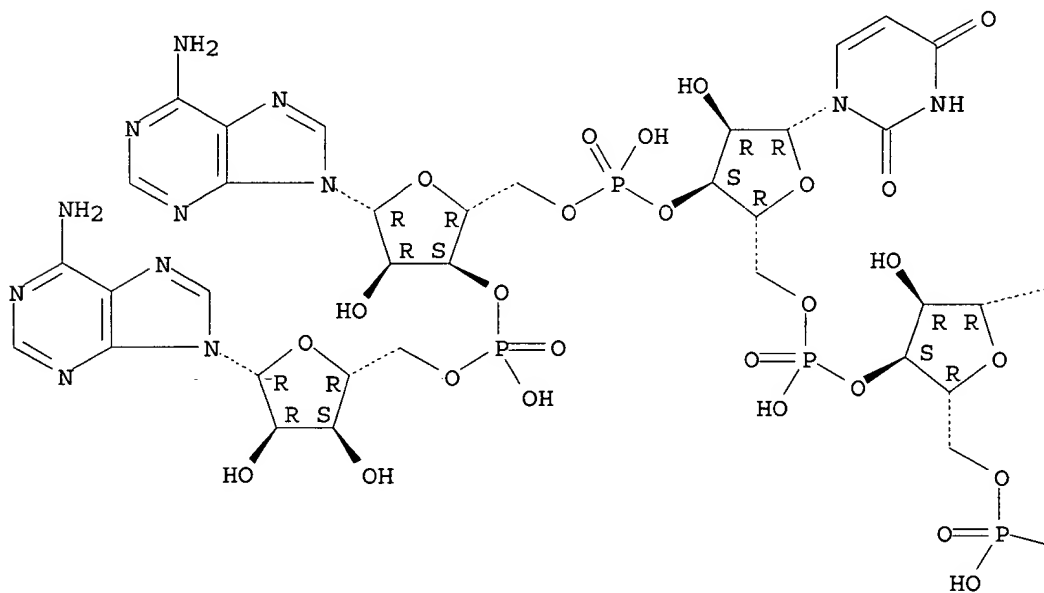
(human telomere; preparation of mammalian artificial chromosomes for gene therapy containing)

RN 204643-99-2 USPATFULL

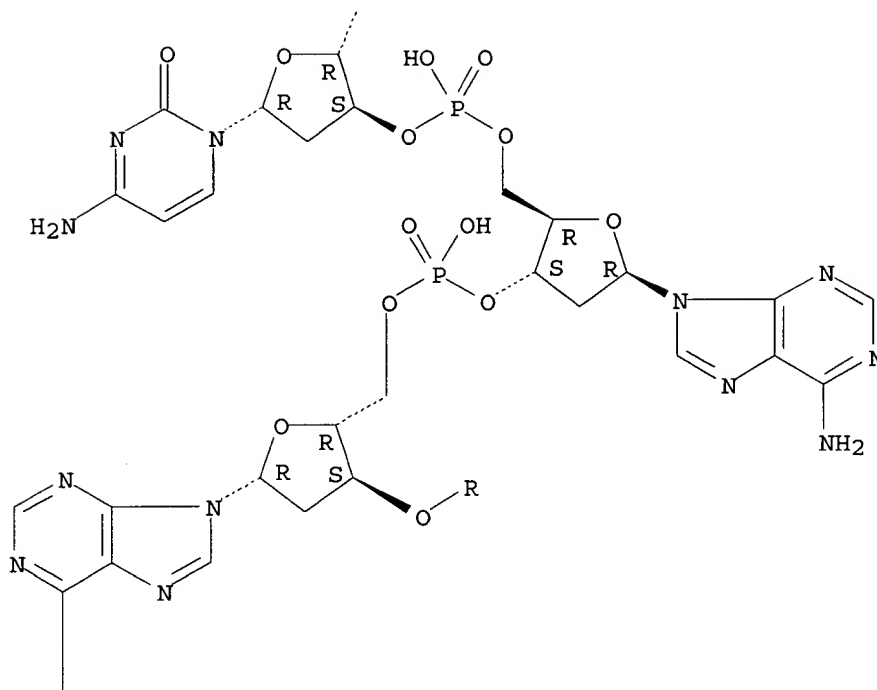
CN Adenosine, cytidylyl-(3'→5')-cytidylyl-(3'→5')-cytidylyl-(3'→5')-uridylyl-(3'→5')-adenylyl-(3'→5')- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

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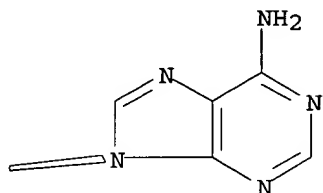
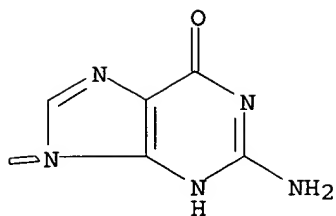
PAGE 4-A

L46 ANSWER 38 OF 53 USPATFULL on STN
 ACCESSION NUMBER: 2004:85164 USPATFULL
 TITLE: Artificial chromosome
 INVENTOR(S): Ishikawa, Fuyuki, Kanagawa, JAPAN
 Hasegawa, Mamoru, Ibaraki, JAPAN
 PATENT ASSIGNEE(S): DNAMEC Research, Inc., Ibaraki, JAPAN (non-U.S. corporation)

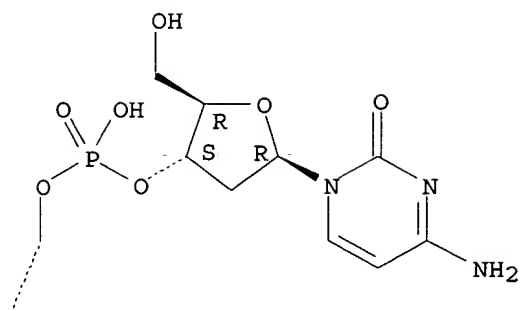
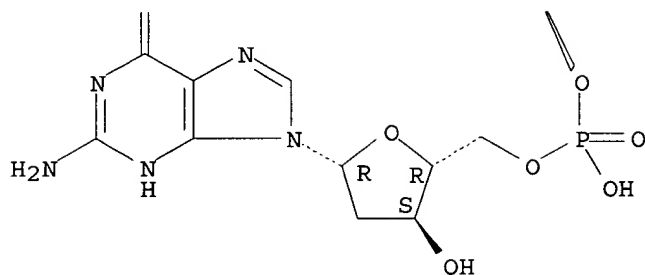
| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 6716608 | B1 | 20040406 |
| | WO 9812336 | | 19980326 |
| APPLICATION INFO.: | US 2000-254947 | | 20000313 (9) |
| | WO 1997-JP3305 | | 19970918 |

| | NUMBER | DATE |
|-----------------------|--------------------|----------|
| PRIORITY INFORMATION: | JP 1996-246749 | 19960918 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Prouty, Rebecca E. | |

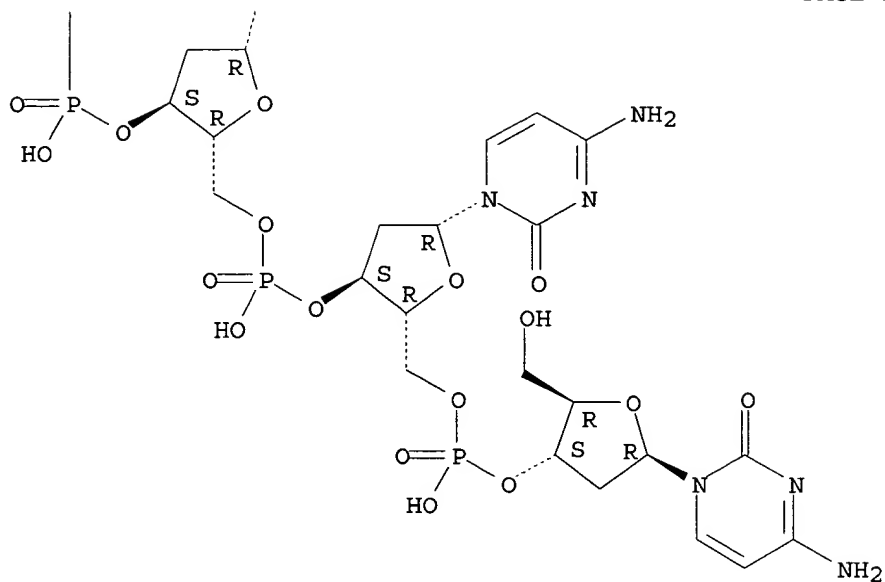
PAGE 1-B



PAGE 2-A



PAGE 2-B

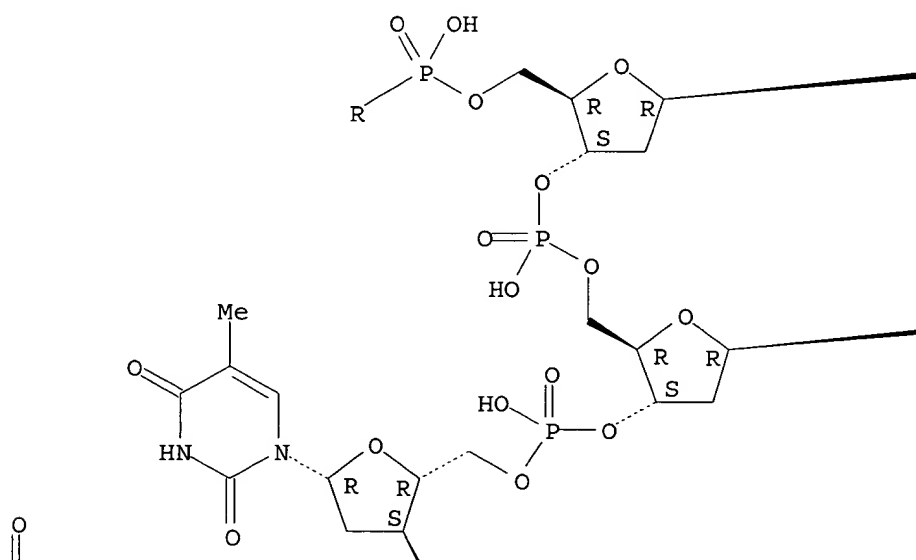


RN 126346-76-7 CAPLUS

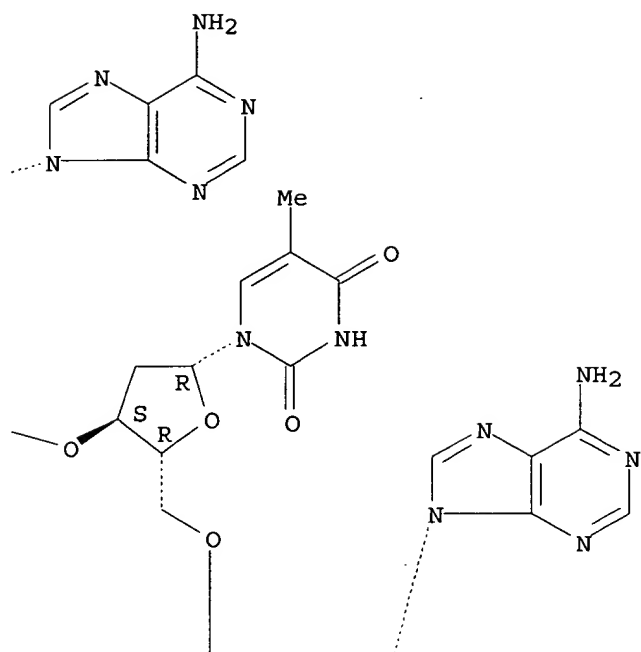
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

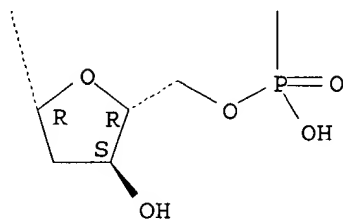
PAGE 1-A



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DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 01196296 | A2 | 19890808 | JP 1988-20174 | 19880129 |
| PRIORITY APPLN. INFO.: | | | JP 1988-20174 | 19880129 |

ED Entered STN: 12 May 1990

AB A number of pentanucleotides inserted immediately upstream of the translation initiation codon (ATG), e.g. CAAAGATG, CCATAATG, CAAACATG, and CCAAGATG, improve the efficiency of gene expression in animal cells. These sequences are used for expression of gene, e.g., for human interferon β (IFN β). The sequence CAAAG was inserted into plasmid pSV2IFN β so that it was linked to ATG of the IFN β gene to give plasmid pSV2IFN(γ) β . CHO cells transformed with pSV2IFN(γ) β produced 11.2-fold more IFN β than those transformed with pSV2IFN β .

IT 126346-75-6 126346-76-7

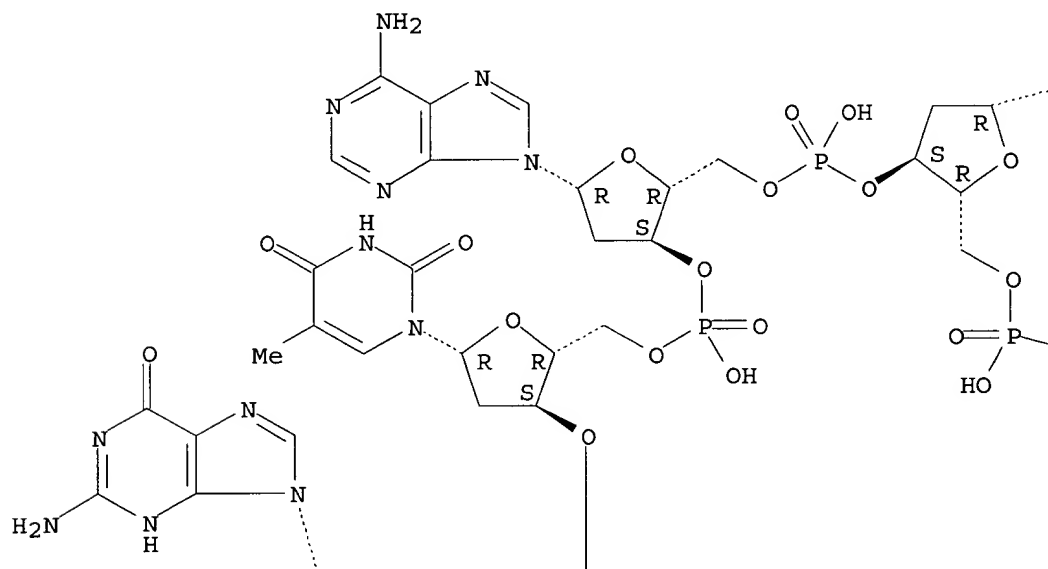
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (in plasmid for improved expression of heterologous genes in animal cells, effect of)

RN 126346-75-6 CAPLUS

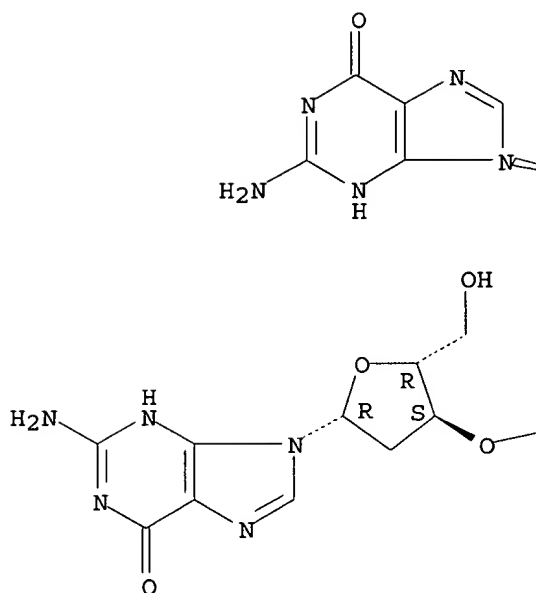
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

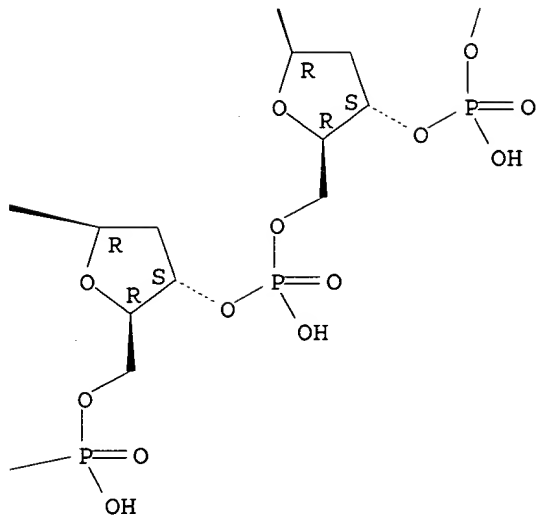
PAGE 1-A



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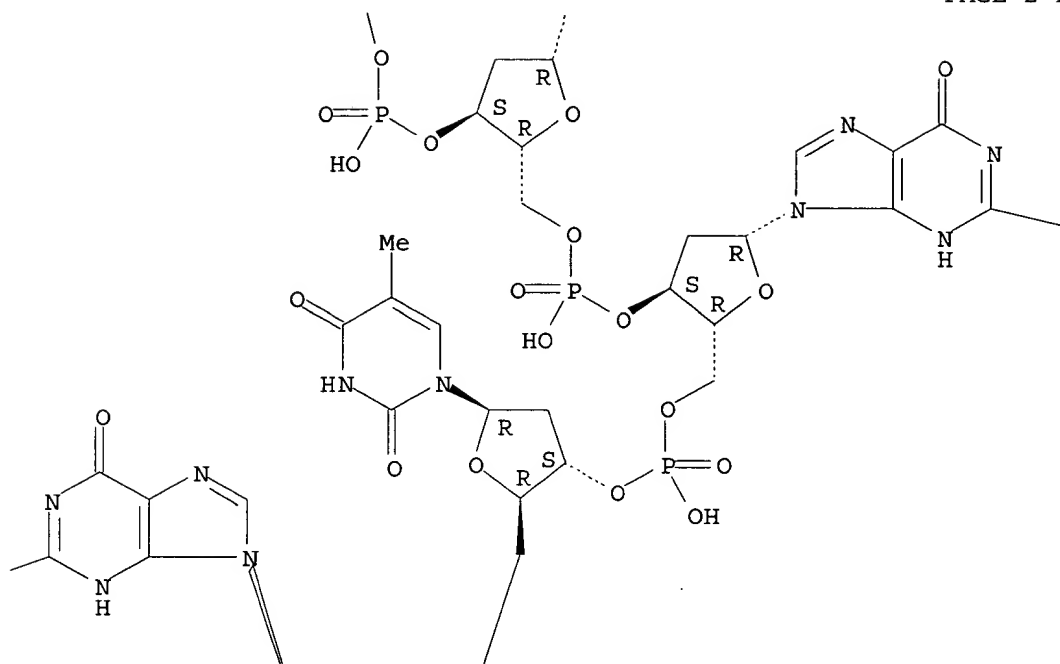


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L46 ANSWER 37 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1990:177016 CAPLUS
DOCUMENT NUMBER: 112:177016
TITLE: Animal cell expression vectors for improved gene
expression
INVENTOR(S): Sakurai, Toru; Naruto, Masanobu; Ozawa, Hitoshi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF

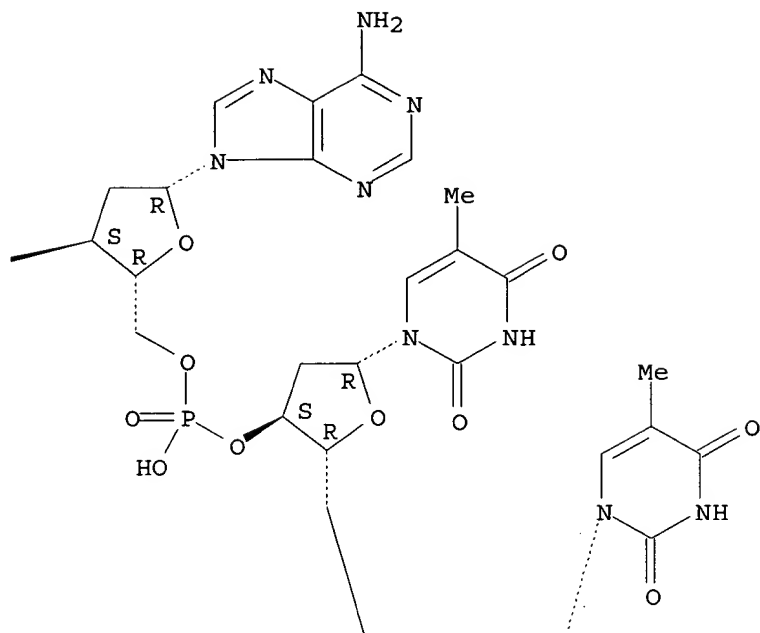
PAGE 2-B



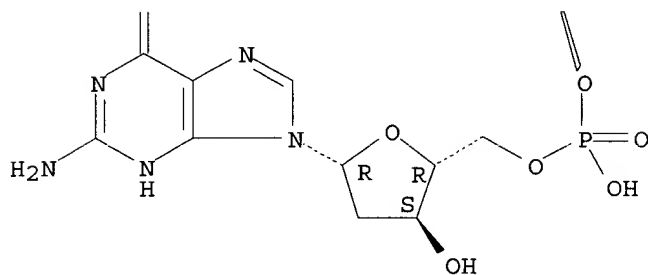
PAGE 2-C



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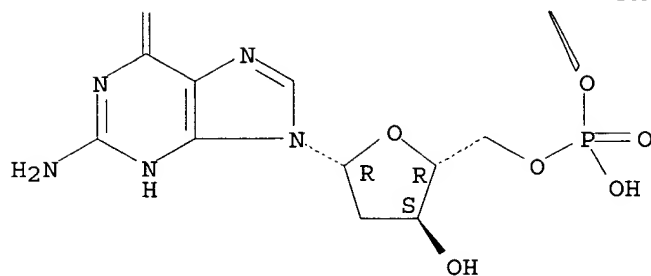


PAGE 2-A



H₂N

PAGE 4-A



IT 125676-84-8

RL: RCT (Reactant); RACT (Reactant or reagent)

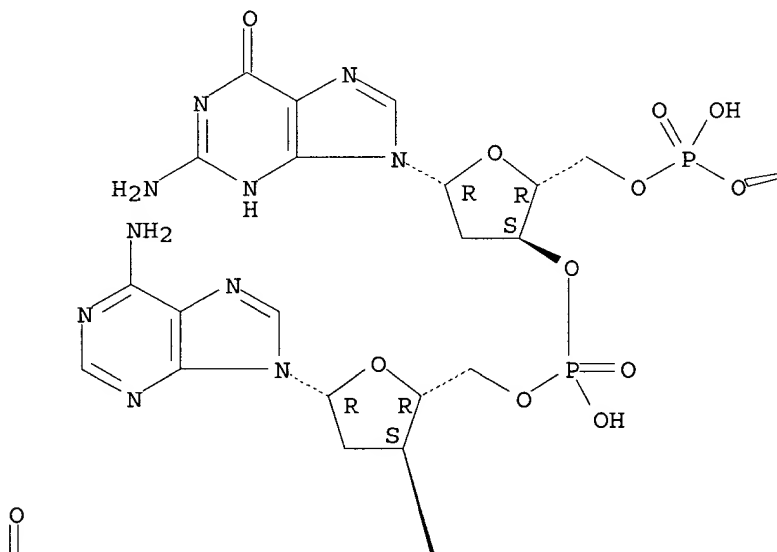
(reaction of, with undecylcyanoethyldiisopropylamidophosphine)

RN 125676-84-8 CAPLUS

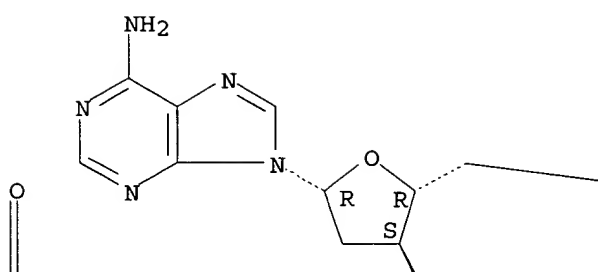
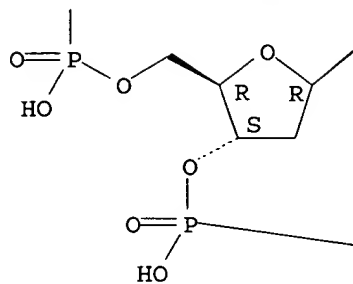
CN Guanosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

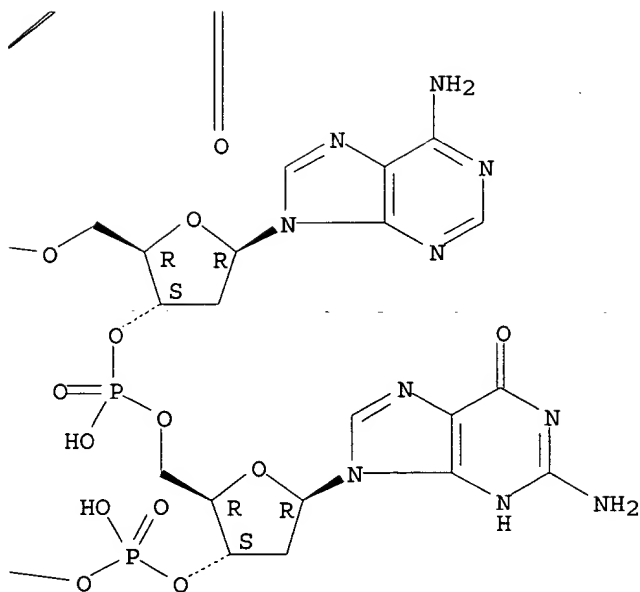
PAGE 1-A



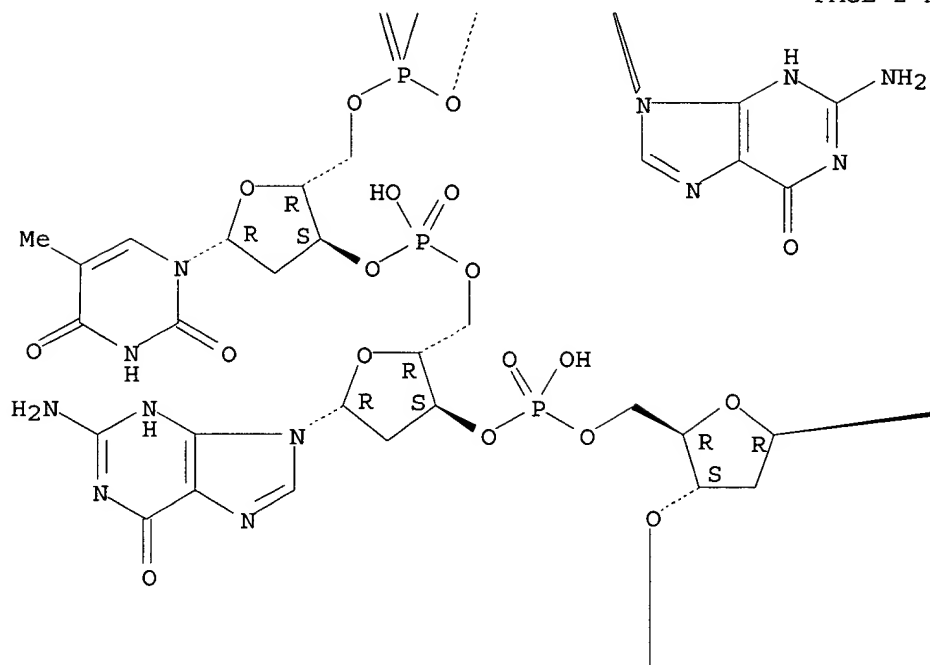
PAGE 3-A



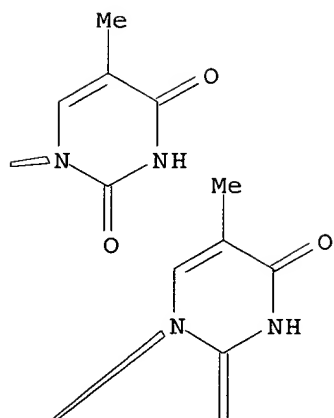
PAGE 3-B



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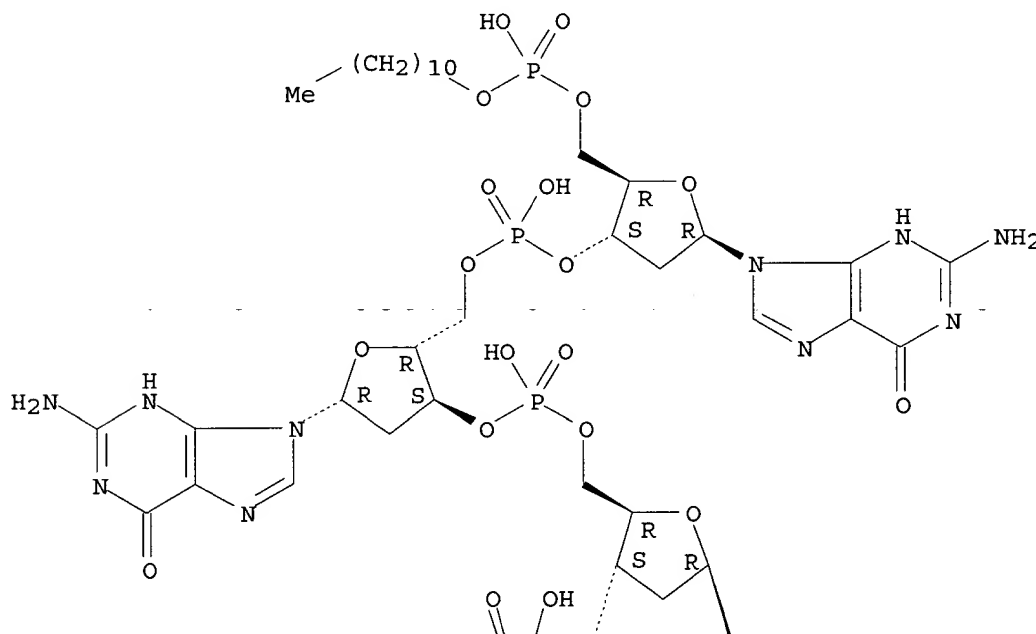
AB To enhance the penetration of oligonucleotides (oligo) into cells, the oligo was combined with the hydrophobic undecyl residue. The oligo complementary to the loop-forming site of the RNA and encoding polymerase 3 of the influenza A virus was synthesized with the undecyl residue added to the 5'-terminal phosphate group. The modified oligo effectively suppressed the influenza A/PR8/34 (H1N1) virus reproduction and the synthesis of virus-specific proteins in MDCK cells. Under the same conditions, the non-modified antisense oligo and modified nonsense oligo did not affect the virus development.

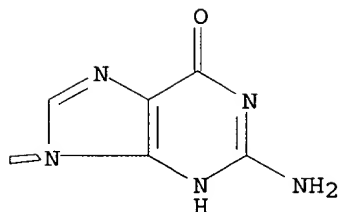
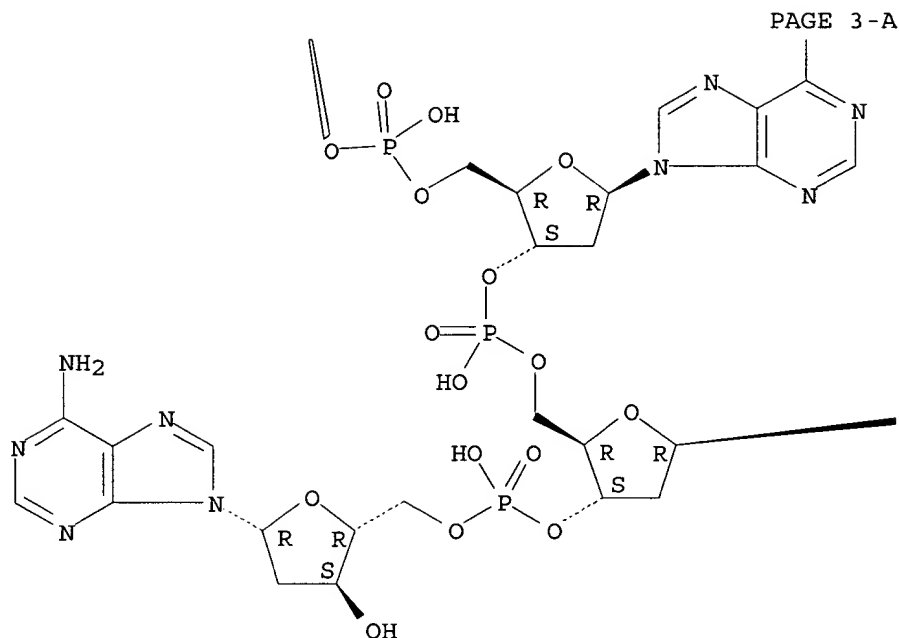
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of and influenza virus response to)

5'-Guanylic acid, 2'-deoxyguanylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-thymidylyl-(5'→3')-thymidylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-thymidylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxy-, 5'-undecyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L46 ANSWER 36 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:111551 CAPLUS

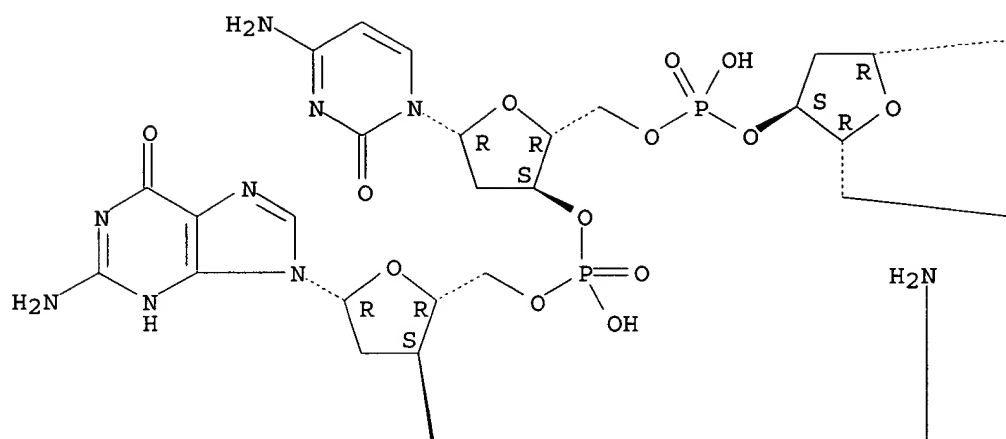
DOCUMENT NUMBER: 112:111551

TITLE: A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells

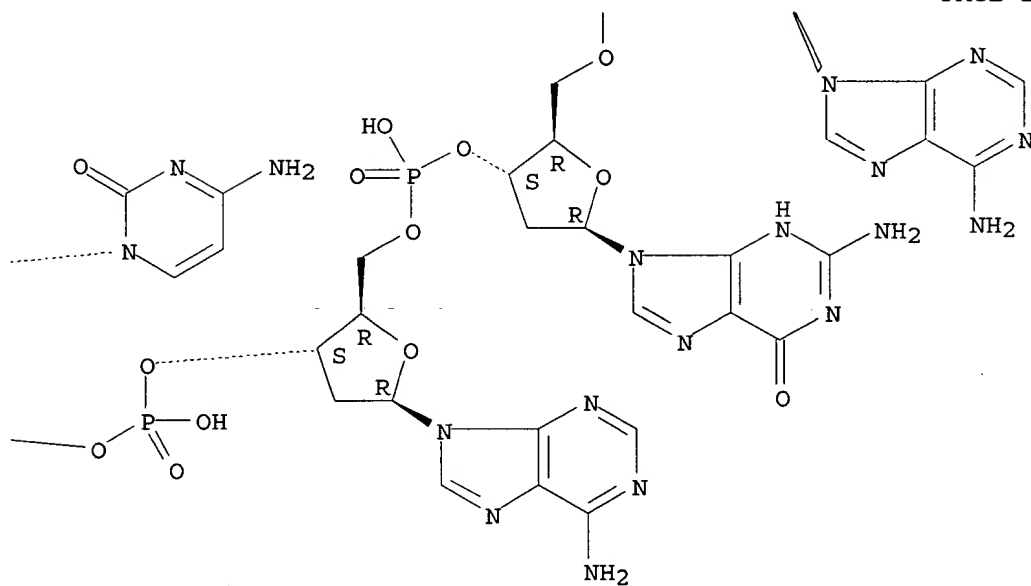
AUTHOR(S): Kabanov, A. V.; Vinogradov, S. V.; Ovcharenko, A. V.; Krivonos, A. V.; Melik-Nubarov, N. S.; Kiselev, V. I.; Severin, E. S.

CORPORATE SOURCE: Res. Cent. Mol. Diagn., USSR Ministry of Health, Moscow, 113149, USSR

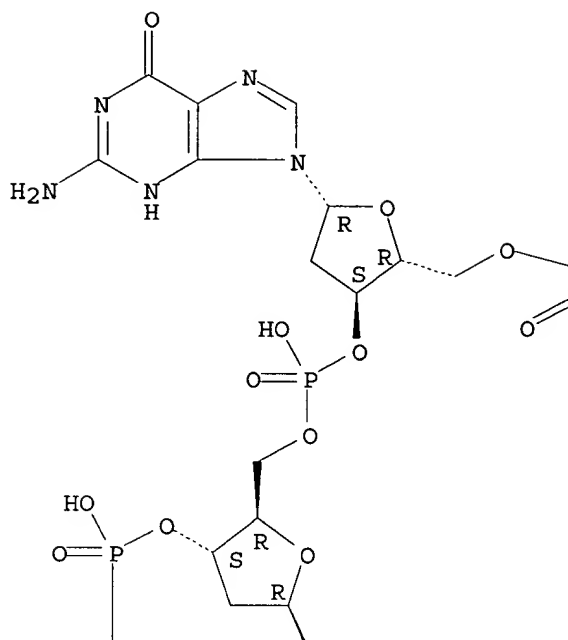
PAGE 2-A



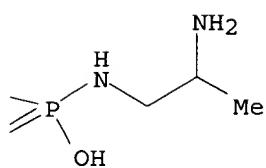
PAGE 2-B



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HO

L46 ANSWER 35 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:17089 CAPLUS

DOCUMENT NUMBER: 114:17089

TITLE: Inhibition of reproduction of the human immunodeficiency virus in a cell culture by the derivatives of antisense oligonucleotides

AUTHOR(S): Abramova, T. V.; Blinov, V. M.; Vlasov, V. V.; Gorn, V. V.; Zarytova, V. F.; Ivanova, E. M.; Konevets, D. A.; Plyasunova, O. A.; Pokrovskii, A. G.; et al.

CORPORATE SOURCE: Novosib. Inst. Bioorg. Khim. Sib. Otd., Novosibirsk, USSR

SOURCE: Doklady Akademii Nauk SSSR (1990), 312(5), 1259-62 [Biochem.]

CODEN: DANKAS; ISSN: 0002-3264

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ED Entered STN: 26 Jan 1991

AB The inhibition of HIV-1 reproduction by 13 antisense oligonucleotides and their derivs. were tested in lymphoid cell line MT-4. The antiviral activity of antisense oligonucleotides might be improved by introducing of hydrophobic and high-reactive groups (e.g. residues of aromatic 2-chloroethylamine) into their mols.

IT 131242-84-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

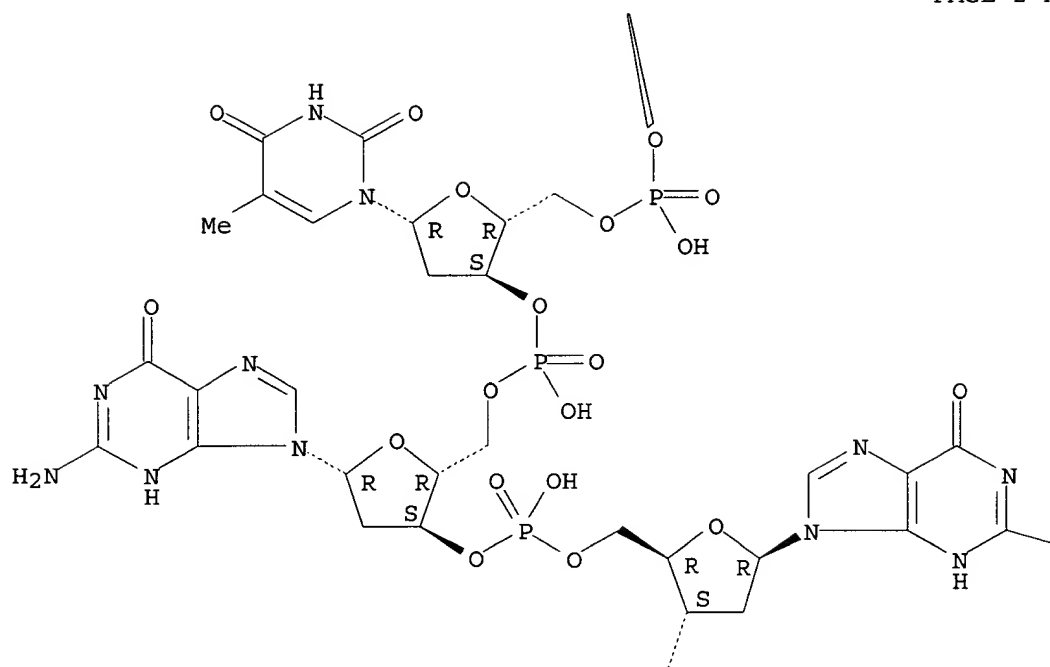
(antiviral activity of, against HIV-1, structure in relation to)

RN 131242-84-7 CAPLUS

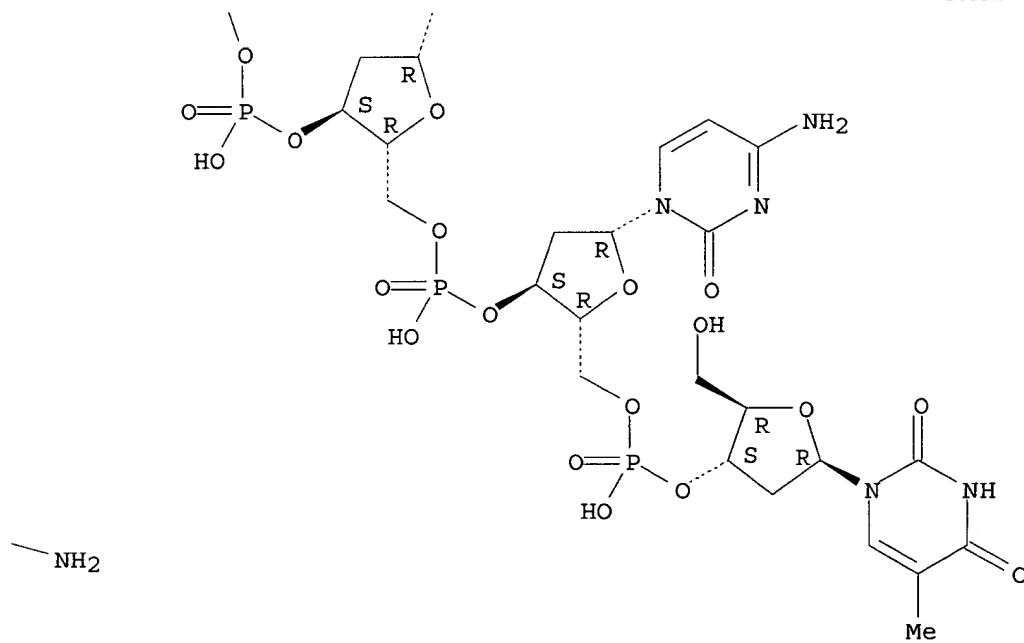
CN Guanosine, 2'-deoxyadenylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxycytidylyl-(5'→3')-2'-deoxycytidylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxy-, 5'-[hydrogen (2-aminopropyl)phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.-

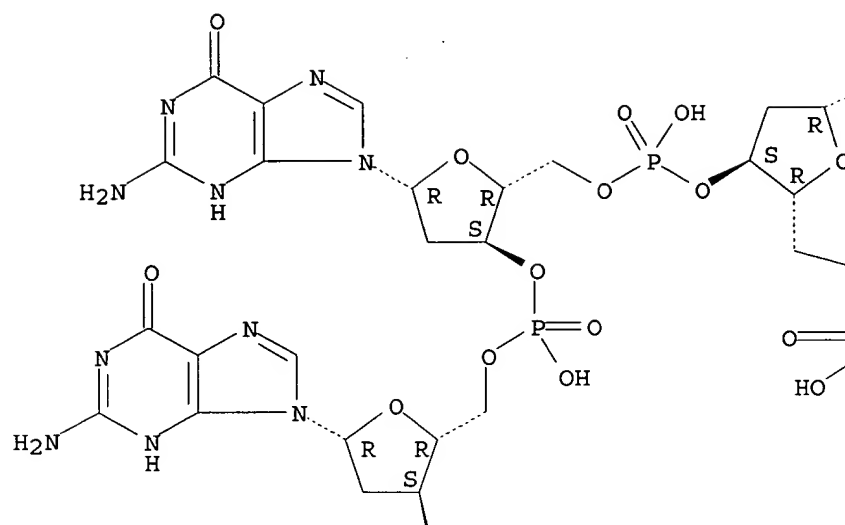
PAGE 2-A



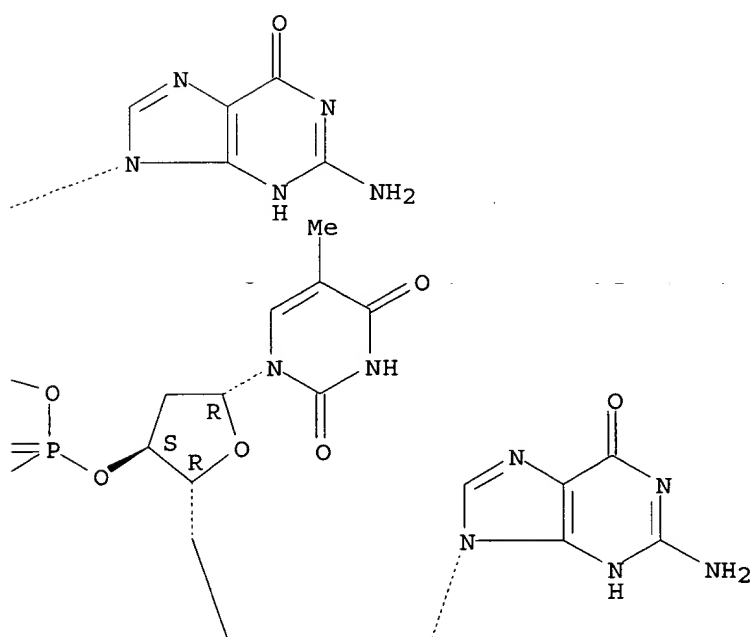
PAGE 2-B



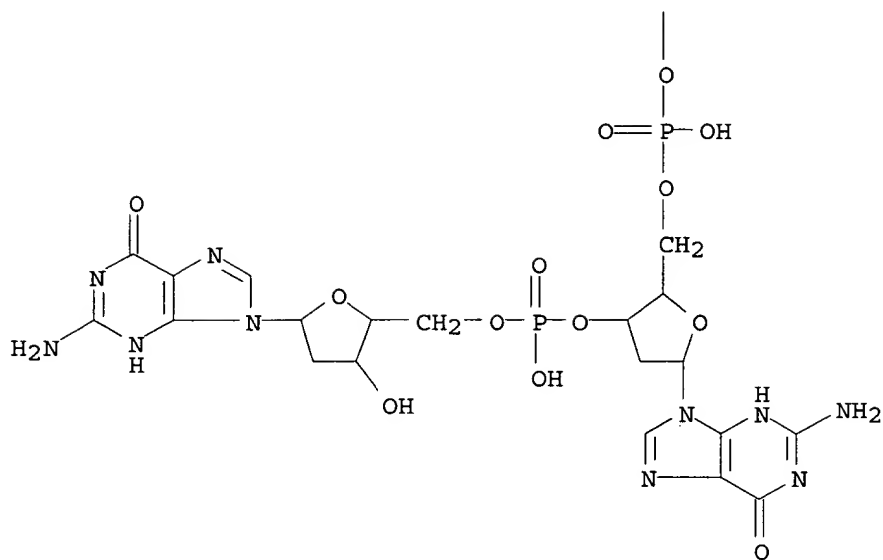
PAGE 1-A



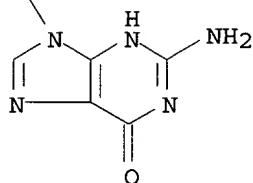
PAGE 1-B



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PAGE 4-B

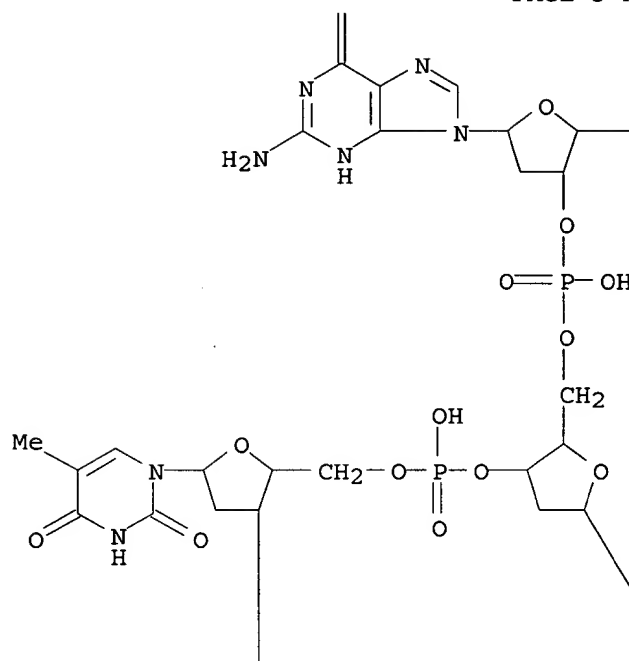


RN 134784-45-5 CAPLUS

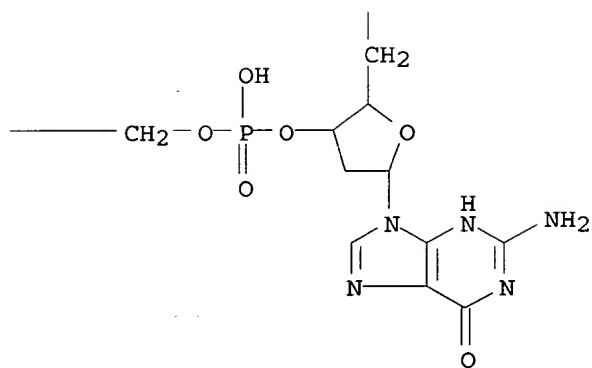
CN Guanosine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

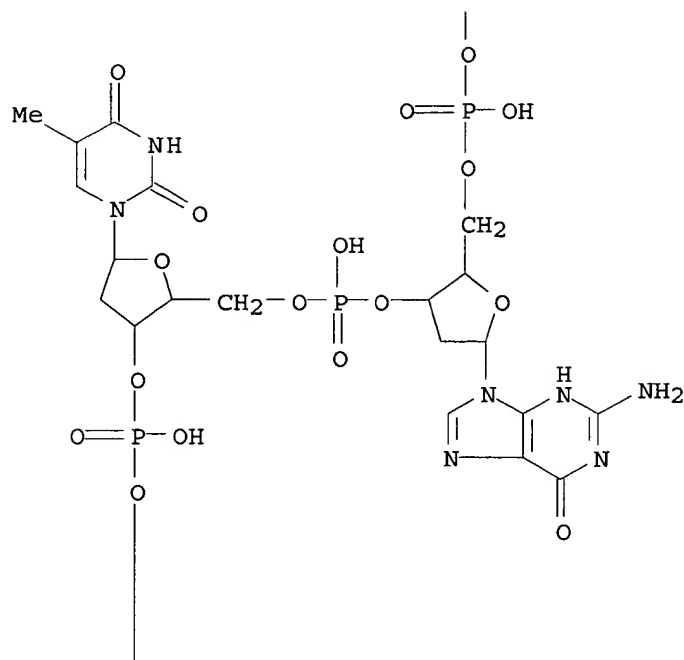
PAGE 3-A



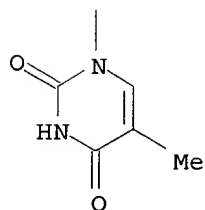
PAGE 3-B



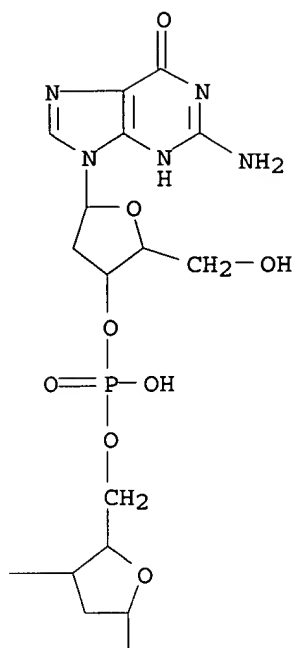
PAGE 2-B



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PAGE 2-A

O

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 02237930 | A2 | 19900920 | JP 1989-56196 | 19890310 |
| PRIORITY APPLN. INFO.: | | | JP 1989-56196 | 19890310 |

OTHER SOURCE(S): MARPAT 115:41979

ED Entered STN: 10 Aug 1991

AB Oligodeoxynucleotides RTGGGTGG (R = G, CG, TCG, etc.) are antitumor agents. Thus, an oligodeoxynucleotide, CGGTGGGCTGTCGTGGGTGG, was synthesized by using the DNA synthesizer Model 430A and bonding sequentially monomers with protective groups. The tumor inhibitory activity of the oligodeoxynucleotide against sarcoma formation in chicken was demonstrated.

IT 134766-66-8P 134784-45-5P

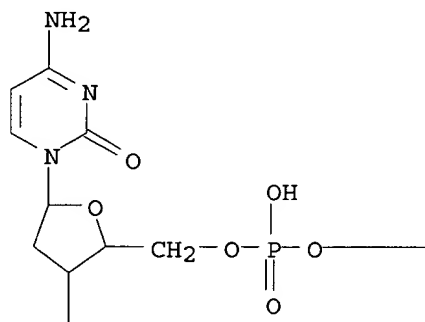
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antitumor agent)

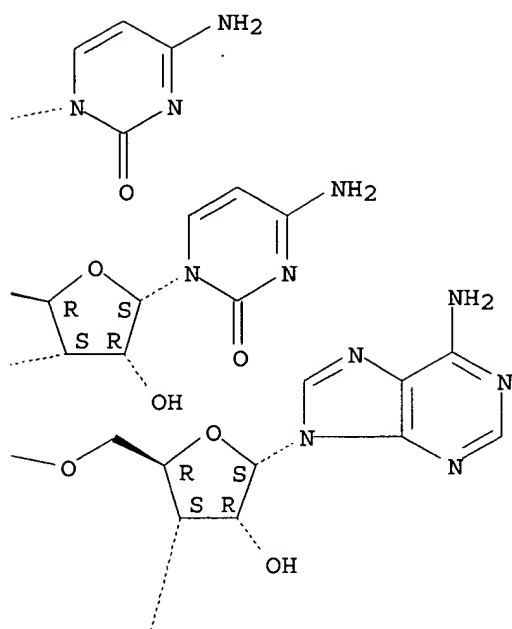
RN 134766-66-8 CAPLUS

CN Guanosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

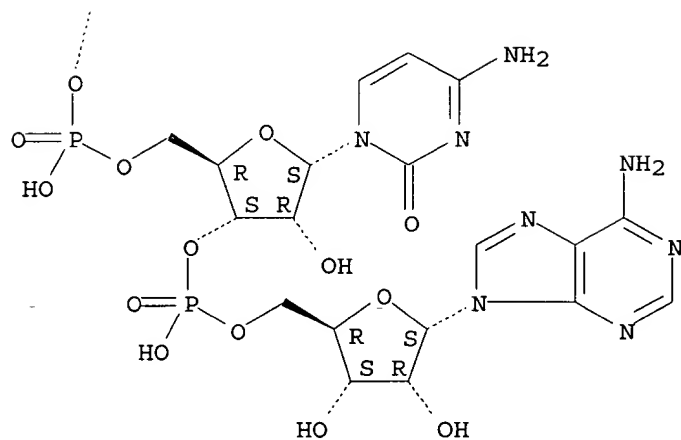
PAGE 1-B



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PAGE 4-B

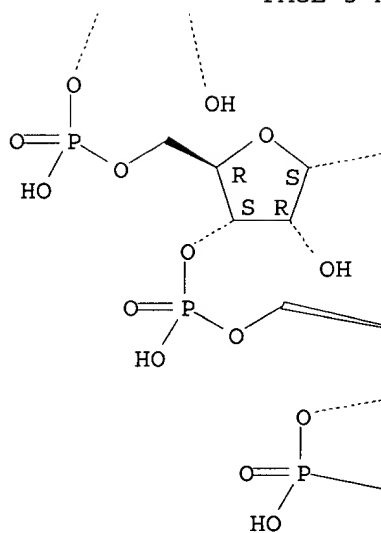


L46 ANSWER 34 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:441979 CAPLUS
 DOCUMENT NUMBER: 115:41979
 TITLE: Oligodeoxynucleotides as antitumor agents
 INVENTOR(S): Mori, Kazuya; Tsukii, Yuji; Uchida, Kumiko
 PATENT ASSIGNEE(S): Tsumura and Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese

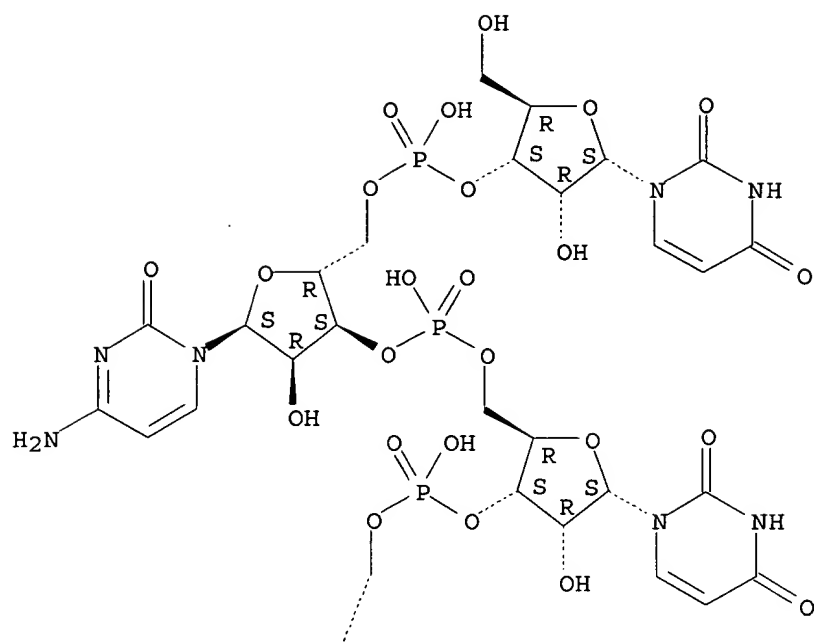
PAGE 2-B

NH₂

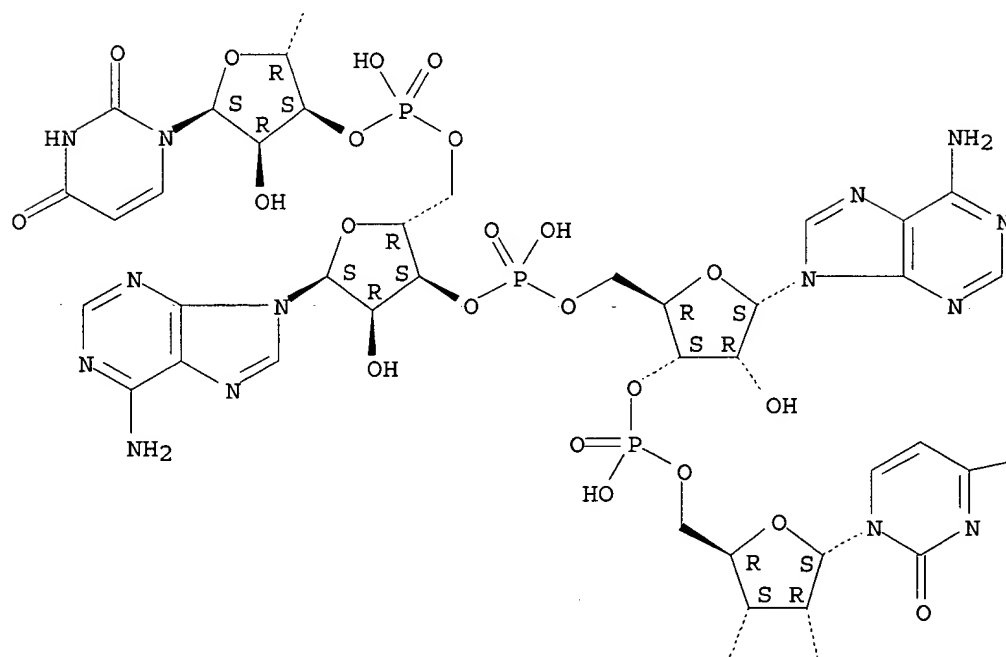
PAGE 3-A



PAGE 1-A



PAGE 2-A



L46 ANSWER 33 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:573624 CAPLUS

DOCUMENT NUMBER: 119:173624

TITLE: Comparative evaluation of seven oligonucleotide analogs as potential antisense agents

AUTHOR(S): Morvan, F.; Porumb, H.; Degols, G.; Lefebvre, I.; Pompon, A.; Sproat, B. S.; Rayner, B.; Malvy, C.; Lebleu, B.; Imbach, J. L.

CORPORATE SOURCE: Lab. Chim. Bio-Org., Univ. Montpellier II, Montpellier, 34095, Fr.

SOURCE: Journal of Medicinal Chemistry (1993), 36(2), 280-7
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 30 Oct 1993

AB The 12-mer analogs, representative of seven different classes of structurally modified oligonucleotides and complementary to the same target, have been compared for their binding affinity for both single-stranded DNA and RNA, resistance to hydrolysis by nucleases in culture medium (RPMI 1640 + 10% inactivated fetal calf serum), and inhibition of HIV-1 replication in de novo infected MT4 T lymphocytes. The viral target was the splice acceptor site of the premessenger coding for the regulatory protein tat. The oligo(2'-O-alkyl)ribonucleotides (β -2'-O-allyl-RNA and β -2'-O-Me-RNA) were shown to form the most stable hybrids with complementary RNA strands whereas the α -anomeric oligodeoxynucleoside phosphorothioate analog displayed the highest stability in the culture medium. All the modified oligonucleotides examined at the present study exhibited a sequence-nonspecific inhibitory effect on HIV-1 replication, the phosphorothioate analogs being the most active ones (ED₅₀ < 1 μ M).

IT 141888-05-3

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); BIOL (Biological study)

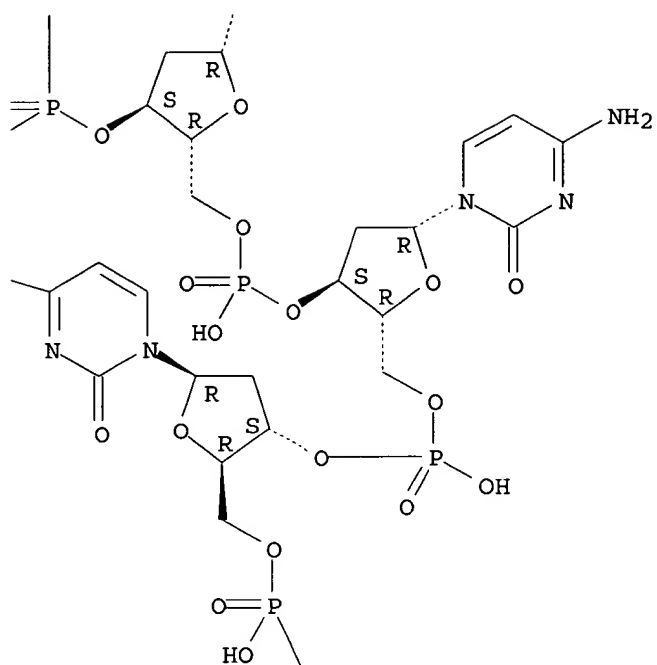
(as antisense agent, to tat gene, HIV-1 inhibition by, in human cells)

RN 141888-05-3 CAPLUS

CN α -Adenosine, α -uridylyl-(3' \rightarrow 5')- α -cytidylyl-(3' \rightarrow 5')- α -uridylyl-(3' \rightarrow 5')- α -uridylyl-(3' \rightarrow 5')- α -adenylyl-(3' \rightarrow 5')- α -adenylyl-(3' \rightarrow 5')- α -cytidylyl-(3' \rightarrow 5')- α -cytidylyl-(3' \rightarrow 5')- α -cytidylyl-(3' \rightarrow 5')- α -adenylyl-(3' \rightarrow 5')- α -cytidylyl-(3' \rightarrow 5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

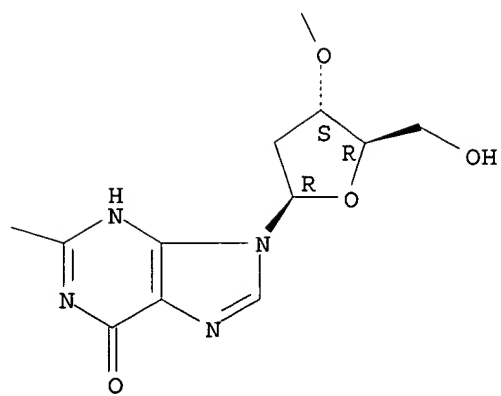
PAGE 2-B



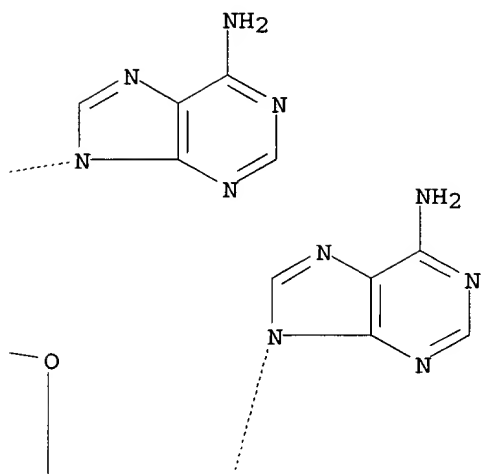
PAGE 3-A



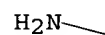
PAGE 3-B



PAGE 1-B



PAGE 2-A



50-55% efficiency (fraction of covalent adducts reagent-target), whereas the derivs. with a terminal reactive group were more effective (70%). The main point of the modification was the guanosine residue to the target which located near to the photoactive group and was not involved in the duplex formation. Tandems of reagents which are complementary to neighboring sites of the target modify predominantly the same guanosine residue up to 80%.

IT 158479-10-8

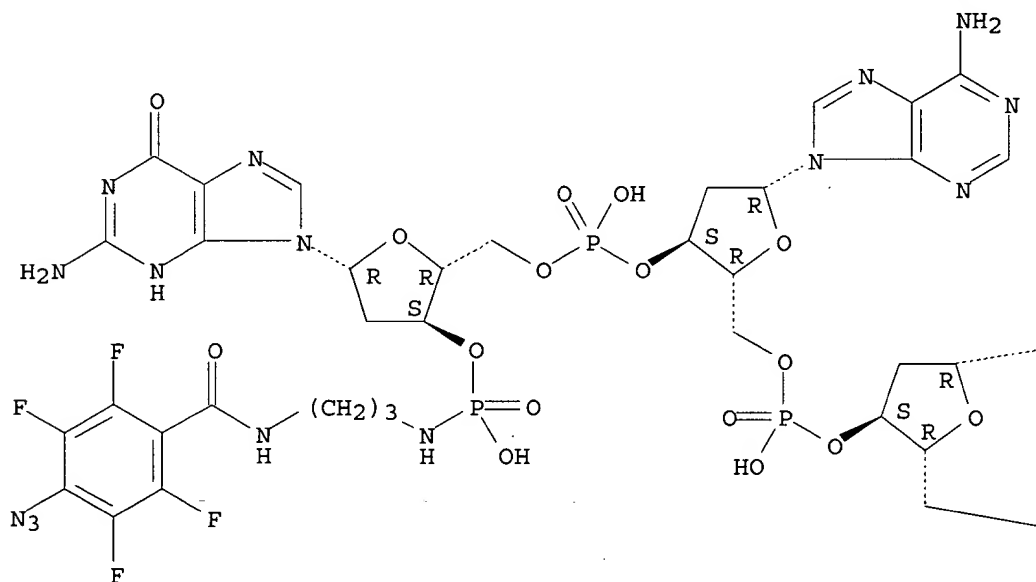
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(site-specific photomodification of oligonucleotides by arylazide and perfluoro arylazide derivs. of oligonucleotides with terminal or internal photoactive group)

RN 158479-10-8 CAPLUS

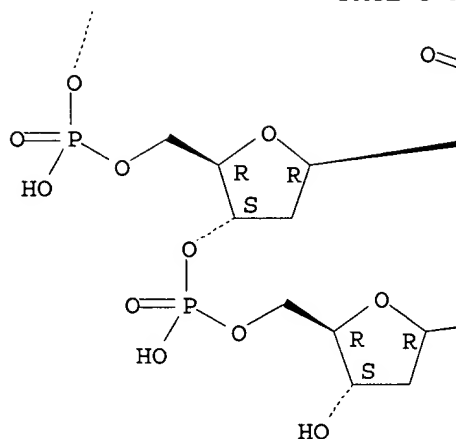
CN Guanosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, 3'-[hydrogen [3-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]propyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

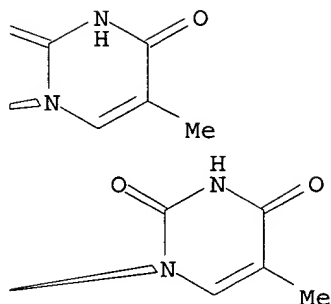
PAGE 1-A



PAGE 3-A

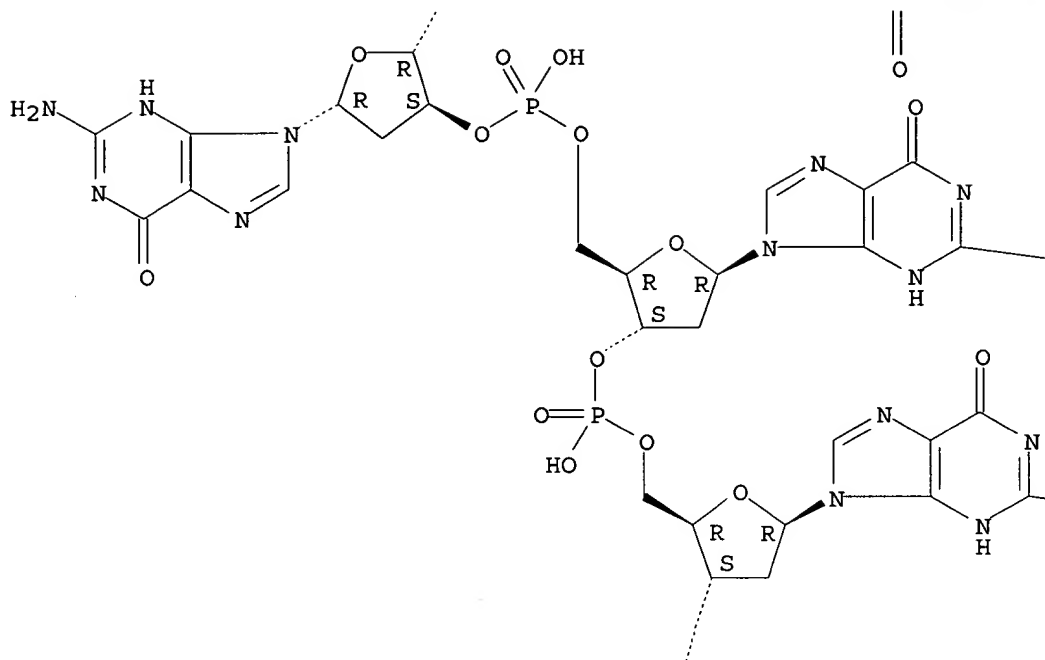


PAGE 3-B



L46 ANSWER 32 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:675333 CAPLUS
 DOCUMENT NUMBER: 121:275333
 TITLE: Site-specific photomodification of nucleic acids by
 arylazide and perfluoro arylazide derivatives of
 oligonucleotides. III. Oligonucleotide reagents with a
 terminal or internal photoactive group
 AUTHOR(S): Levina, A. S.; Tabatadze, D. R.; Zarytova, V. F.;
 Dobrikov, M. I.; Gorn, V. V.; Khalimskaya, L. M.
 CORPORATE SOURCE: Novosibirsk Institute Bioorganic Chemistry,
 Novosibirsk, Russia
 SOURCE: Bioorganicheskaya Khimiya (1994), 20(1), 21-9
 CODEN: BIKHD7; ISSN: 0132-3423
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 10 Dec 1994
 AB Photomodification of target oligonucleotides with reagents bearing
 p-azidotetrafluorobenzamide group at various positions of the
 oligonucleotide address was investigated. The photoactive group was
 attached to the 5'- or 3'-terminal phosphate or at the C5-position of a
 deoxyuridine residue at the 5'-end or inside the oligonucleotide chain.
 The reagents with the internal photoactive group modified the target with

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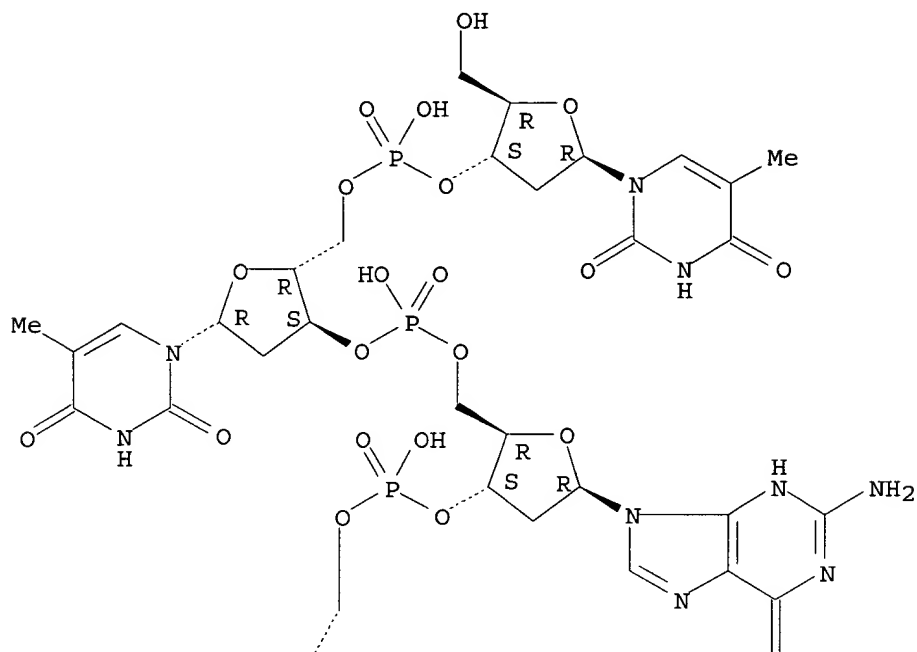
NH₂

NH₂

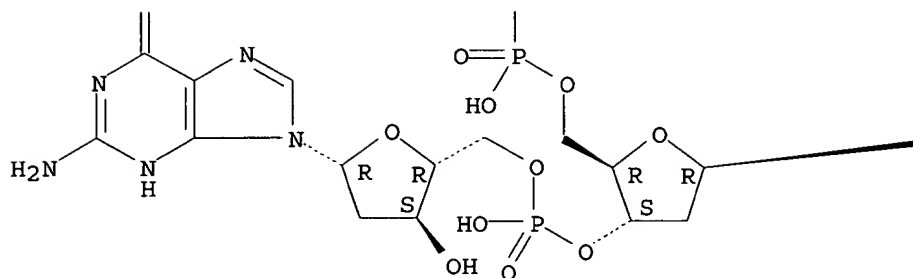
CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-
(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

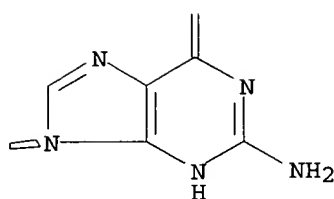
PAGE 1-A



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RN 155902-32-2 CAPLUS

CN DNA, d(G-T-T-G-G-A-G-A-C-C-G-G-I-G-T-T-G-G-I-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 31 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:217625 CAPLUS

DOCUMENT NUMBER: 122:133642

TITLE: 2-Diphenylmethylsilylethyl (DPSE): a versatile protecting group for oligodeoxyribonucleotide synthesis

AUTHOR(S): Ravikumar, Vasulinga T.; Cole, Douglas L.

CORPORATE SOURCE: Isis Pharmaceuticals, Carlsbad, CA, 92008, USA

SOURCE: Gene (1994), 149(1), 157-61

CODEN: GENED6; ISSN: 0378-1119

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 30 Nov 1994

AB 2-Diphenylmethylsilylethyl (DPSE) is a new protecting group for the internucleotidic bonds in the solid-support and solution-phase synthesis of oligodeoxyribonucleotides by the phosphoramidite approach. This group is stable under acidic conditions and can be removed by a β -fragmentation mechanism under mild conditions using aqueous NH_4OH . Alternatively, this group can also be removed using tetrafluorosilane in acetonitrile. Antiviral activity of oligodeoxyribonucleotide is reported (no data).

IT 126208-94-4P

RL: BAC (Biological activity or effector, except adverse); BSU

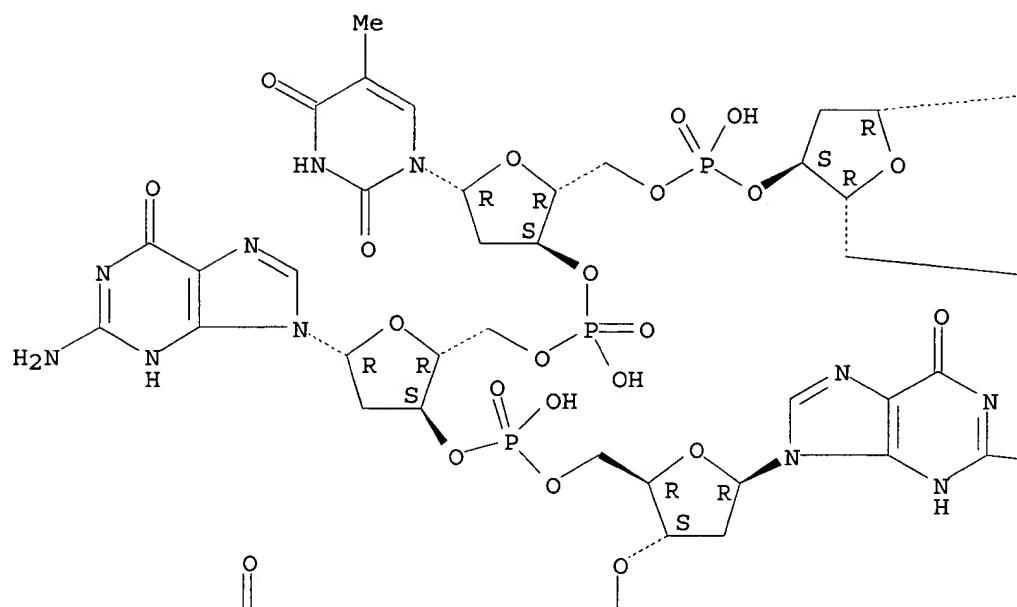
(Biological study, unclassified); SPN (Synthetic preparation); BIOL

(Biological study); PREP (Preparation)

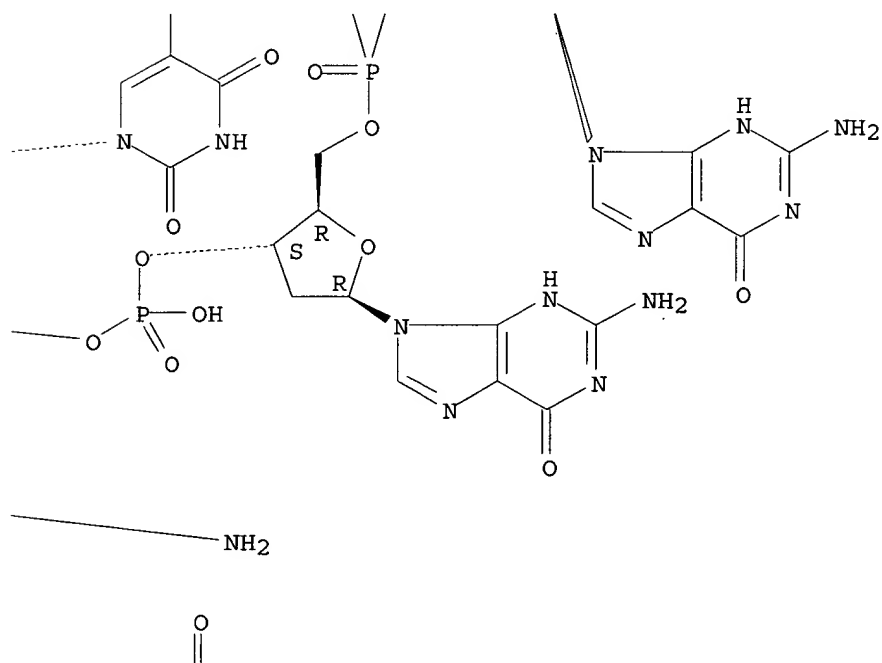
(diphenylmethylsilylethyl protective group for Merrifield synthesis of oligodeoxyribonucleotides)

RN 126208-94-4 CAPLUS

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PAGE 2-B

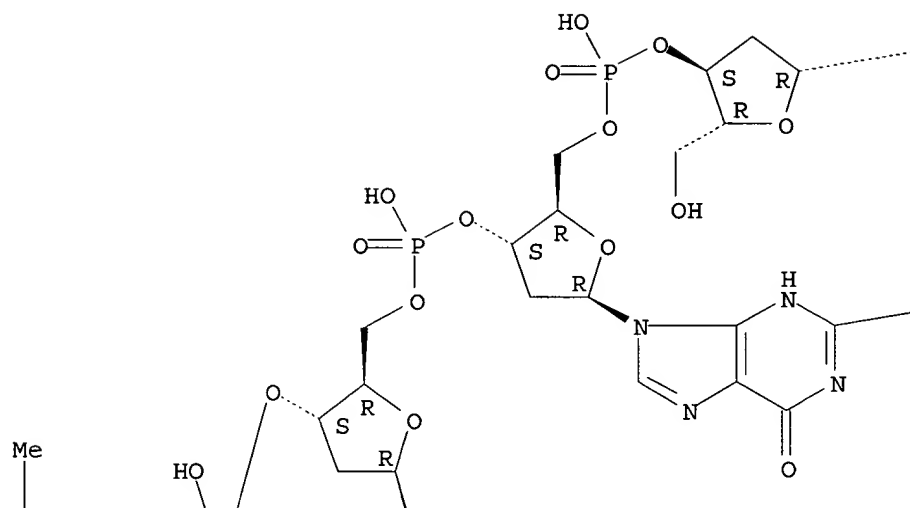


RN 126596-01-8 CAPLUS

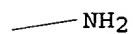
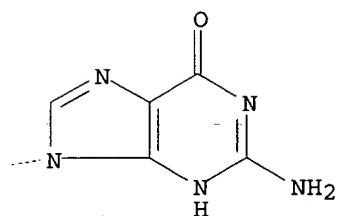
CN DNA, d(G-G-G-G-T-T-G-G-G-G) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

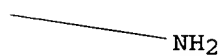
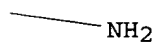
PAGE 1-B



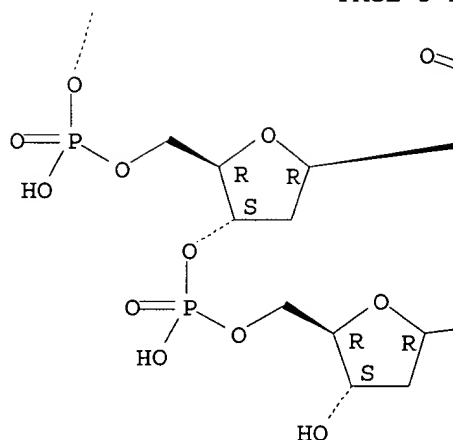
PAGE 1-C



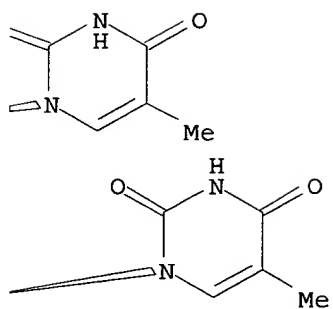
PAGE 2-B



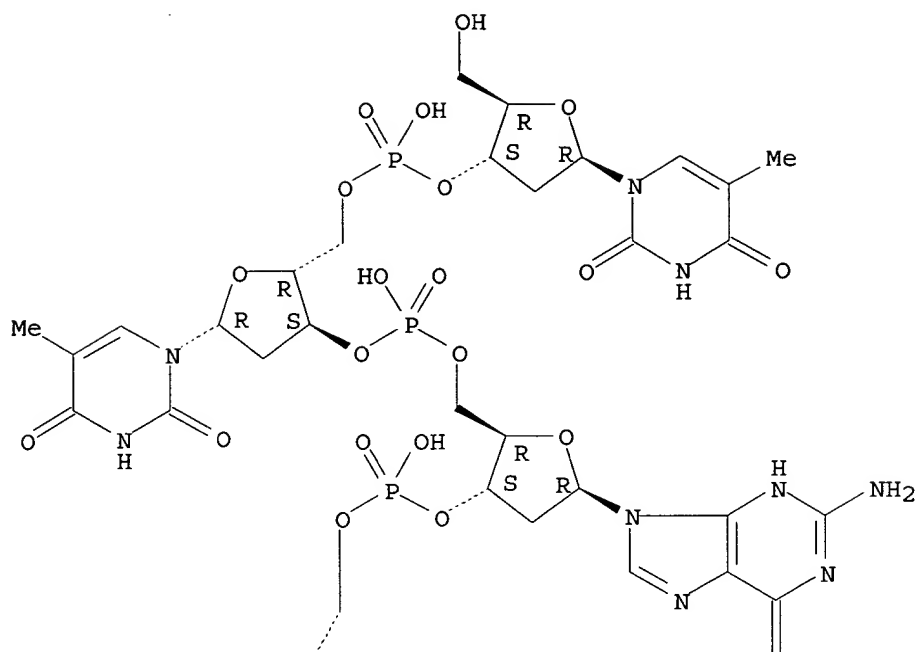
PAGE 3-A



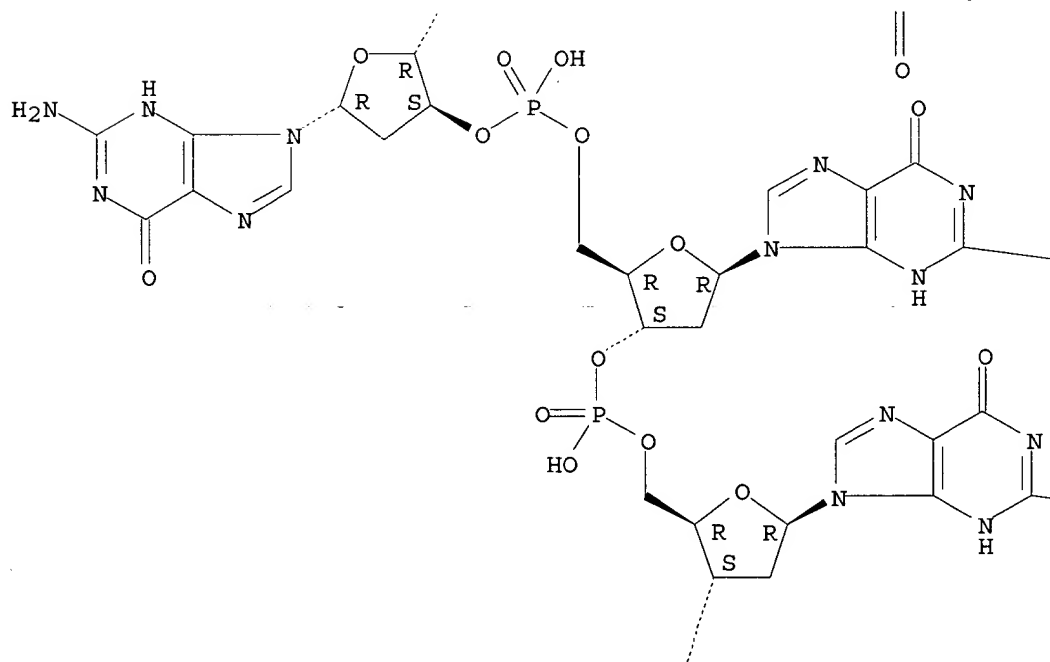
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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
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PRIORITY APPLN. INFO.:
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ED Entered STN: 10 Dec 1994

AB Compns. and methods are provided for the treatment and diagnosis of herpesvirus infections. In accordance with preferred embodiments, oligonucleotides are provided which are specifically hybridizable with RNA or DNA deriving from a herpesvirus gene corresponding to one of the open reading frames UL5, UL8, UL9, UL20, UL27, UL29, UL30, UL42, UL52, and IE175 of herpes simplex virus type 1. The oligonucleotide comprises nucleotide units sufficient in identity and number to effect said specific hybridization. In other preferred embodiments, the oligonucleotides are specifically hybridizable with a translation initiation site, a coding region or a 5'-untranslated region. Methods of treating animals suspected of being infected with herpesvirus comprising contacting the animal with an oligonucleotide of the invention are disclosed. Methods for treatment of infections caused by herpes simplex virus type 1, herpes simplex virus type 2, cytomegalovirus, human herpes virus 6, Epstein Barr virus or varicella zoster virus are disclosed.

IT 126208-94-4P 126596-01-8P 155902-32-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

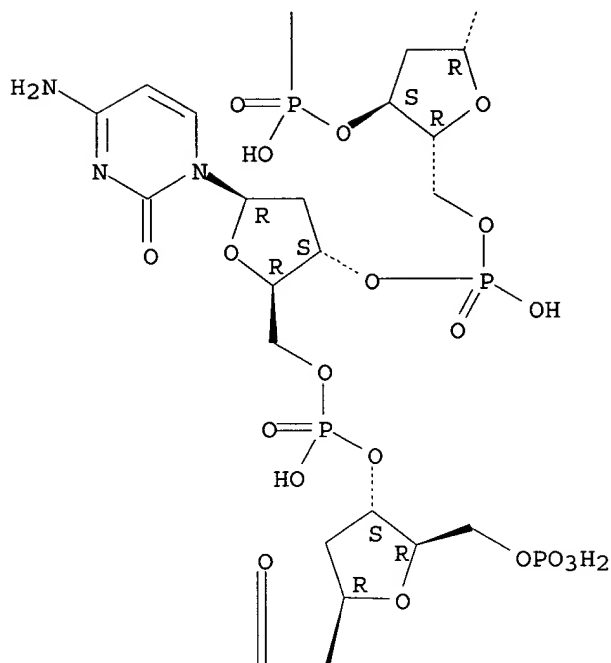
(oligonucleotides for treatment or diagnosis of infection by herpes simplex virus type 1 or herpes simplex virus type 2 or cytomegalovirus or human herpes virus 6 or Epstein Barr virus or varicella zoster virus)

RN 126208-94-4 CAPLUS

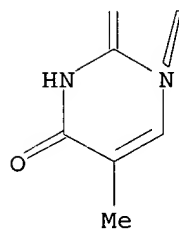
CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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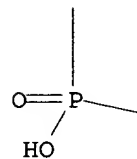


L46 -ANSWER 30 OF 53 -CAPLUS -COPYRIGHT 2005 ACS-on STN
 ACCESSION NUMBER: 1994:672152 CAPLUS
 DOCUMENT NUMBER: 121:272152
 TITLE: Oligonucleotide therapies for modulating the effects of herpesviruses
 INVENTOR(S): Draper, Kenneth G.; Crooke, Stanley T.; Mirabelli, Christopher K.; Ecker, David J.; Hanecak, Ronnie C.; Anderson, Kevin P.; Brown-Driver, Vickie L.; Wyatt, Jacqueline R.
 PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 71
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
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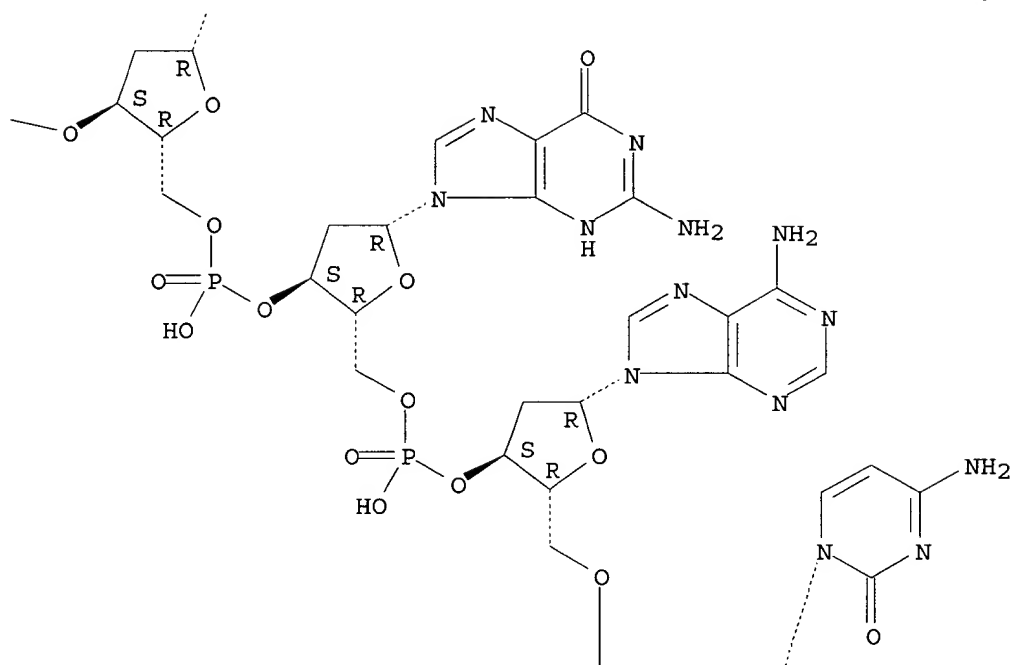
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Searched by Barb O'Bryen, STIC 2-2518

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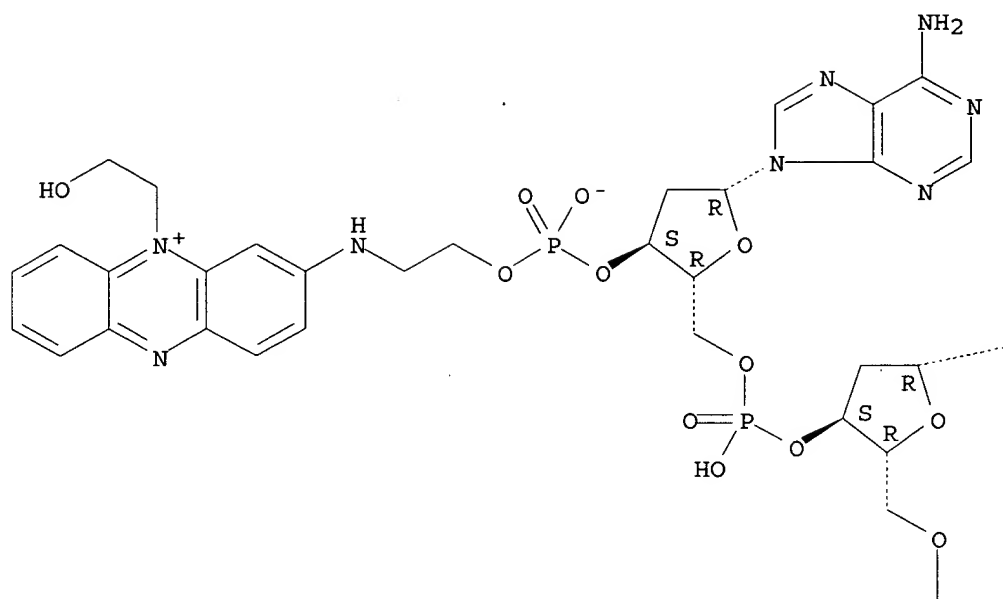
PAGE 2-B



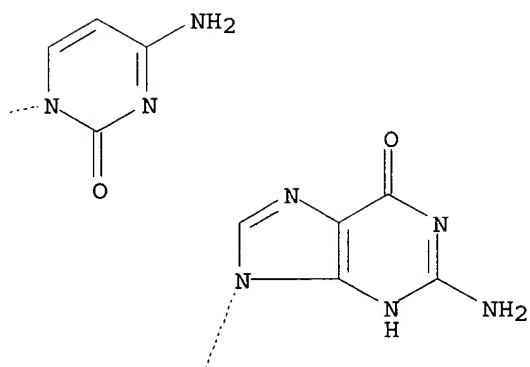
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

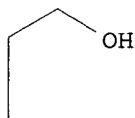
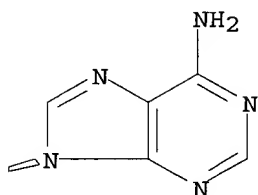
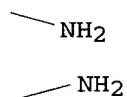
PAGE 1-A



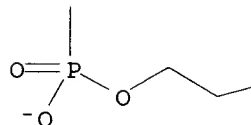
PAGE 1-B



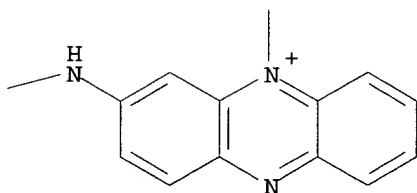
PAGE 3-B



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IT 197095-70-8

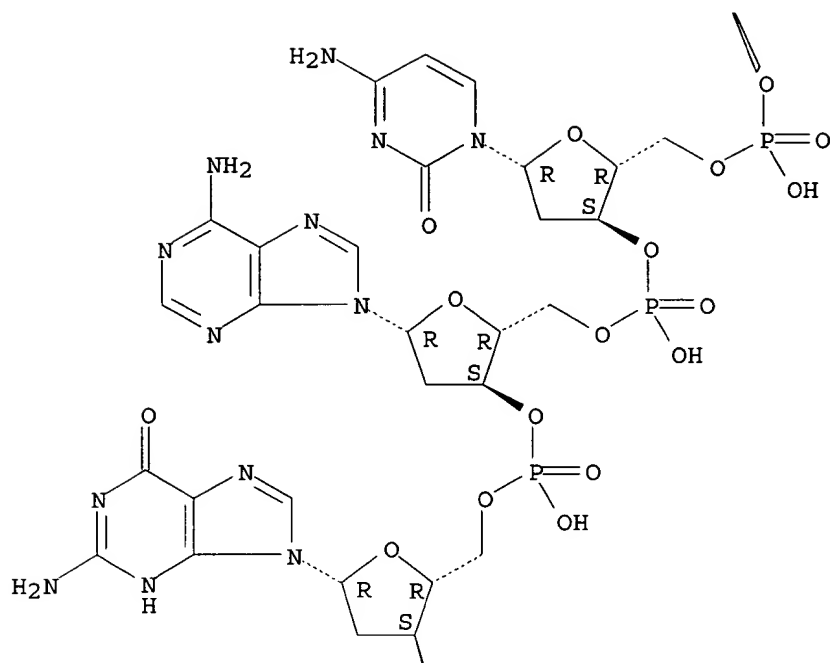
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of short oligonucleotide alkylating derivs. and effect of various effectors on alkylation of target DNA)

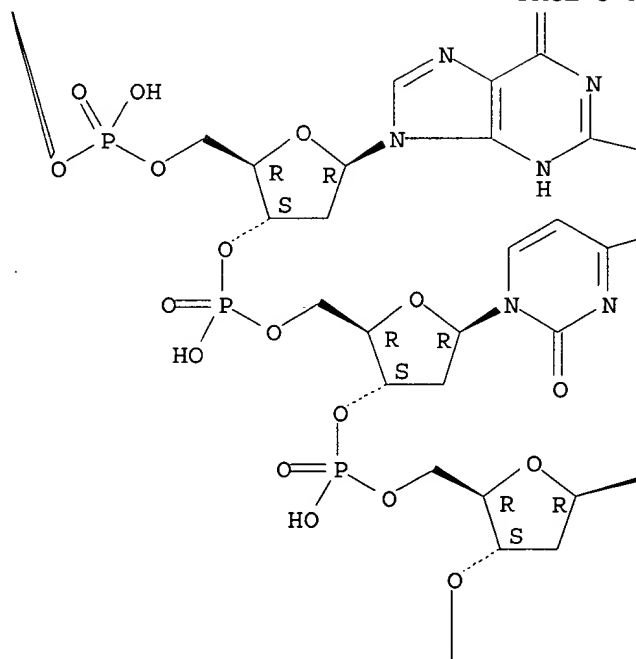
RN 197095-70-8 CAPLUS

CN 3'-Adenylic acid, 5'-O-phosphonothymidyl-(3'→5')-2'-
 deoxycytidyl-(3'→5')-2'-deoxycytidyl-(3'→5')-2'-
 deoxyadenyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidyl-(3'→5')-2'-deoxy-,
 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, inner salt

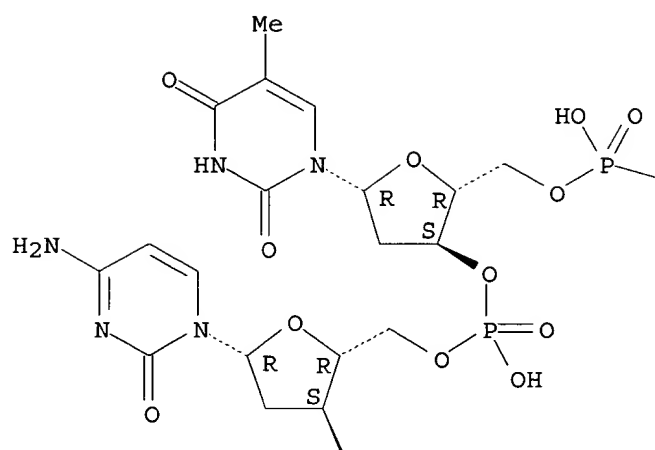
PAGE 2-A



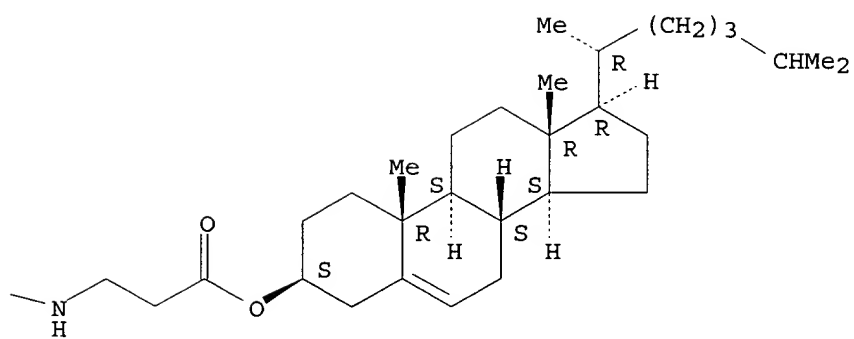
PAGE 3-A



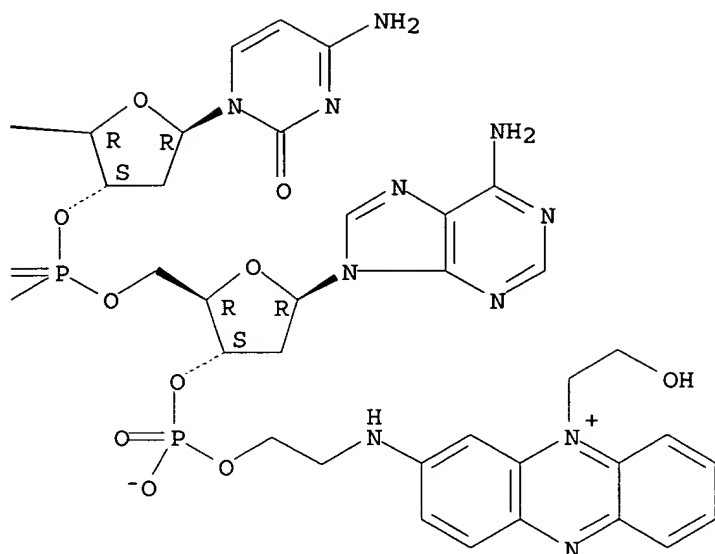
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IT 197095-64-0P

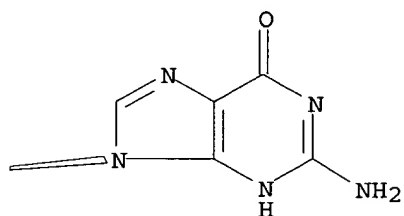
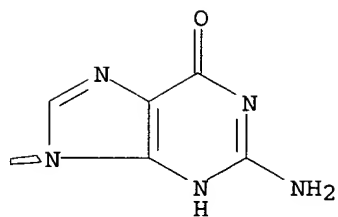
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (effector; preparation of short oligonucleotide alkylating derivs. and effect of various effectors on alkylation of target DNA)

RN 197095-64-0 CAPLUS

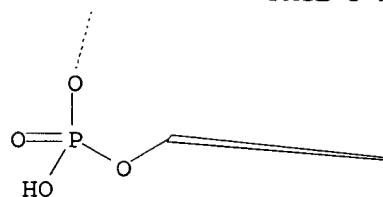
CN 3'-Adenylic acid, 5'-O-[[[3-[[[(3 β)-cholest-5-en-3-yl]oxy]-3-oxopropyl]amino]hydroxyphosphinyl]thymidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxyadenylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxyguanylyl-(3' \rightarrow 5')-2'-deoxycytidylyl-(3' \rightarrow 5')-2'-deoxy-, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

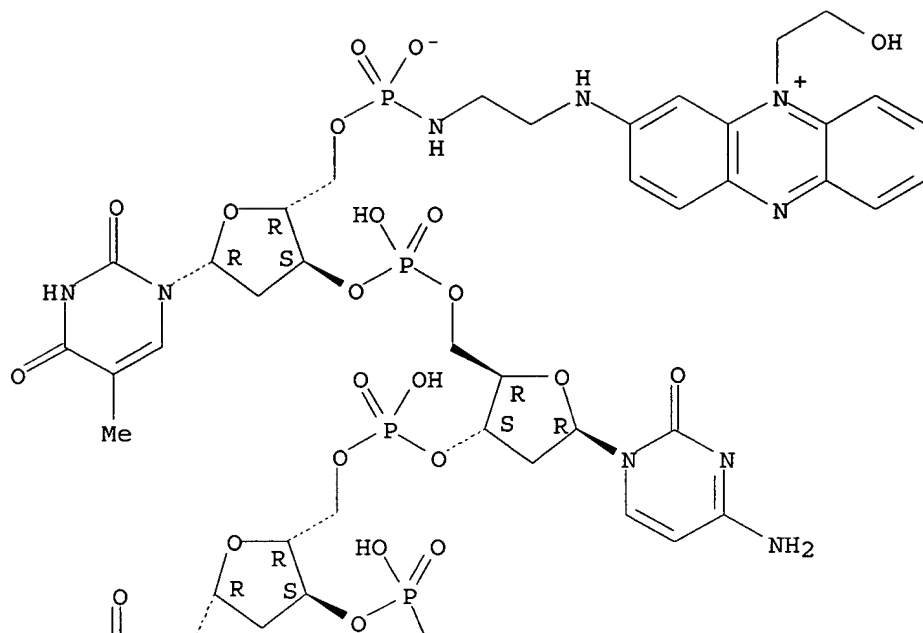
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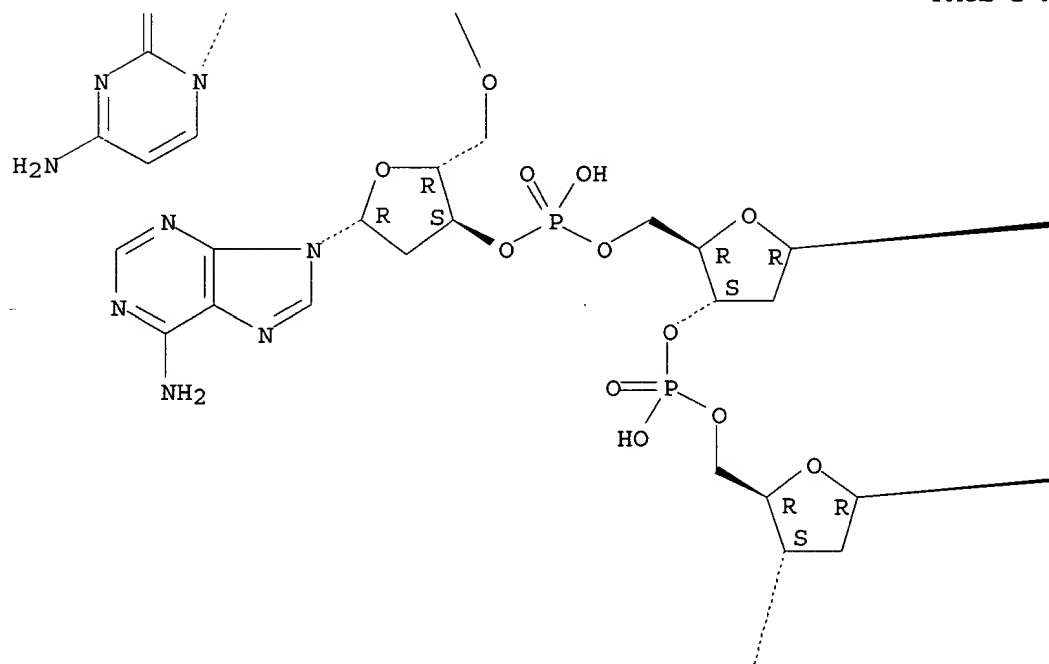
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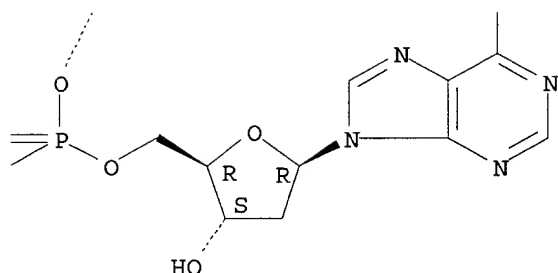
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PAGE 3-A



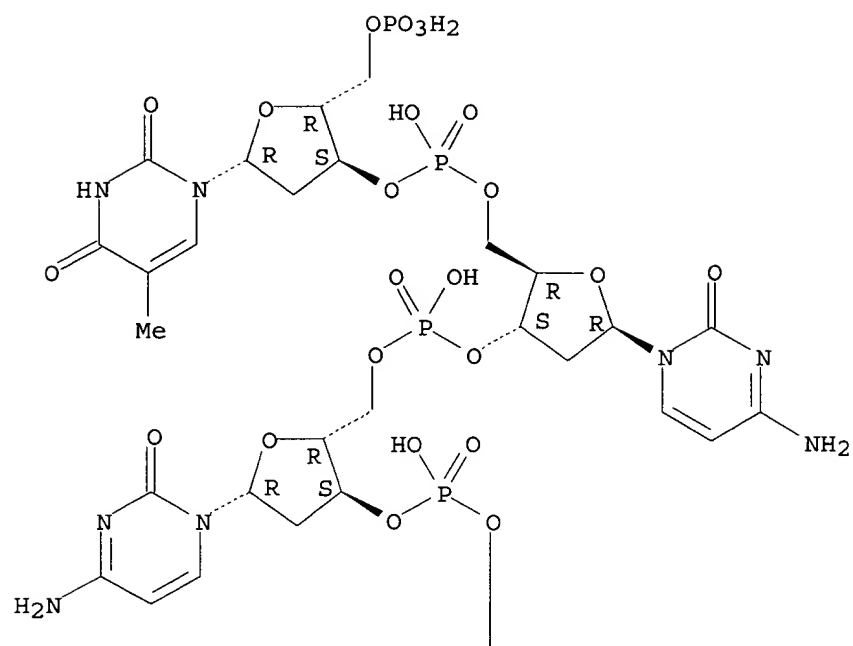
PAGE 3-B



RN 197095-62-8 CAPLUS
 CN 3'-Adenylic acid, 5'-O-[hydroxy[[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl]amino]phosphinyl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-, 3'-[2-[[10-(2-hydroxyethyl)phenazinium-2-yl]amino]ethyl] ester, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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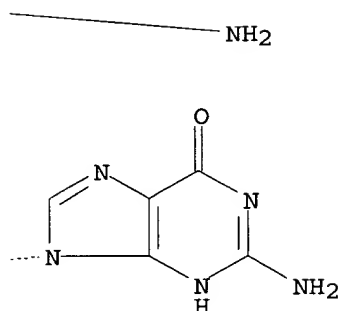
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 127:304361
ED Entered STN: 15 Sep 1997
AB It was shown that the tandem of the derivs. of short oligonucleotides efficiently and site specifically interacts with target 20 base deoxyribonucleotide (M). The very low hybridization ability of tetranucleotide (D) and its 3'-cholesterol and 3'-estrone esters (D-ChS and D-EsS, resp.) increases significantly in the presence of the effectors octanucleotides (E1 and E2), and their 5',3'-diphenazinium (Phn-E1-Phn and Phn-E2-Phn) and 5'-cholesteryl-3'-phenazinium (ChS-E1-Phn and ChS-E2-Phn) derivs., which flank them on the target strand. The influence of the effectors on the interaction of the target M with tetranucleotide D or its alkylating derivs. (RCl-D) increases in a series $E1 + E2 < ChS-E1-Phn + ChS-E2-Phn < Phn-E1-Phn + Phn-E2-Phn$. For the steroid derivs., D-ChS and D-EsS, and the reagents based on them (RCl-D-ChS and RCl-D-EsS), this series is $E1 + E2 < Phn-E1-Phn + Phn-E2-Phn < ChS-E1-Phn + ChS-E2-Phn$. The modification level of the target M with derivative RCl-D-EsS in the presence of ChS-E1-Phn and ChS-E2-Phn reaches 40% even at 37°C under conditions close to physiol. The possibility of using 5'-cholesteryl-3'-phenazinium-containing oligonucleotides as effectors of the interaction of target DNA with the derivs. of short oligonucleotides was demonstrated.

IT 197095-57-1 197095-62-8
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effector; interaction of short oligonucleotide derivs. with nucleic acids and effect of various effectors on alkylation of target DNA)

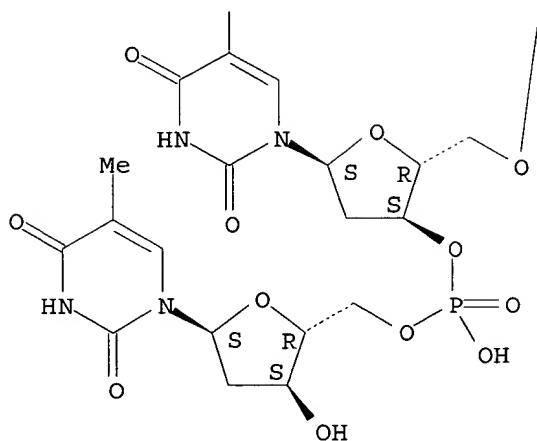
RN 197095-57-1 CAPLUS
CN Adenosine, 5'-O-phosphonothymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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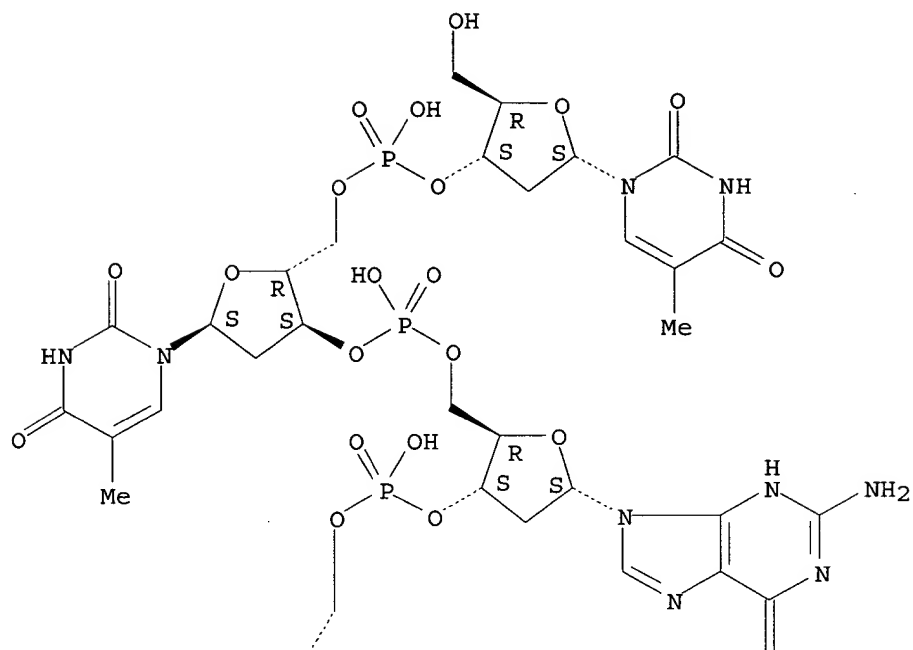


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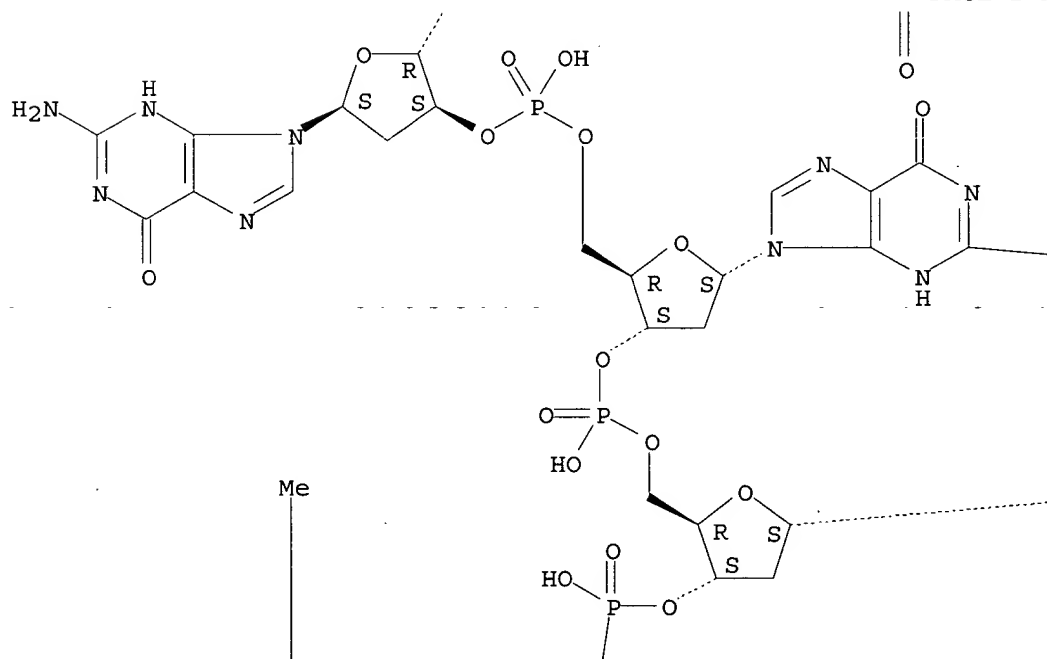


L46 ANSWER 29 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1997:588415 CAPLUS
 DOCUMENT NUMBER: 127:304361
 TITLE: Interaction of short oligonucleotide derivatives with
 nucleic acids. Part 1. Effect of various types of
 effectors on alkylation of target DNA
 AUTHOR(S): Pushnyi, D. V.; Pyshnaya, I. A.; Lokhov, S. G.;
 Ivanova, E. M.; Zarytova, V. F.
 CORPORATE SOURCE: Novosib. Inst. Bioorg. Khim., SO RAN, Novosibirsk,
 Russia
 SOURCE: Bioorganicheskaya Khimiya (1995), 21(09), 709-716
 CODEN: BIKHD7; ISSN: 0132-3423
 PUBLISHER: MAIK Nauka
 DOCUMENT TYPE: Journal

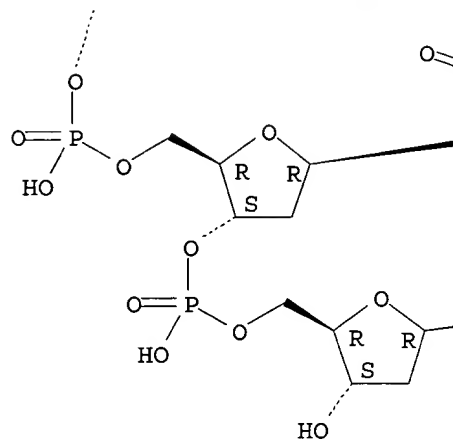
PAGE 1-A



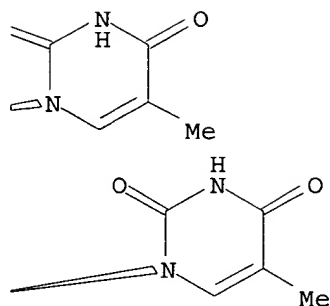
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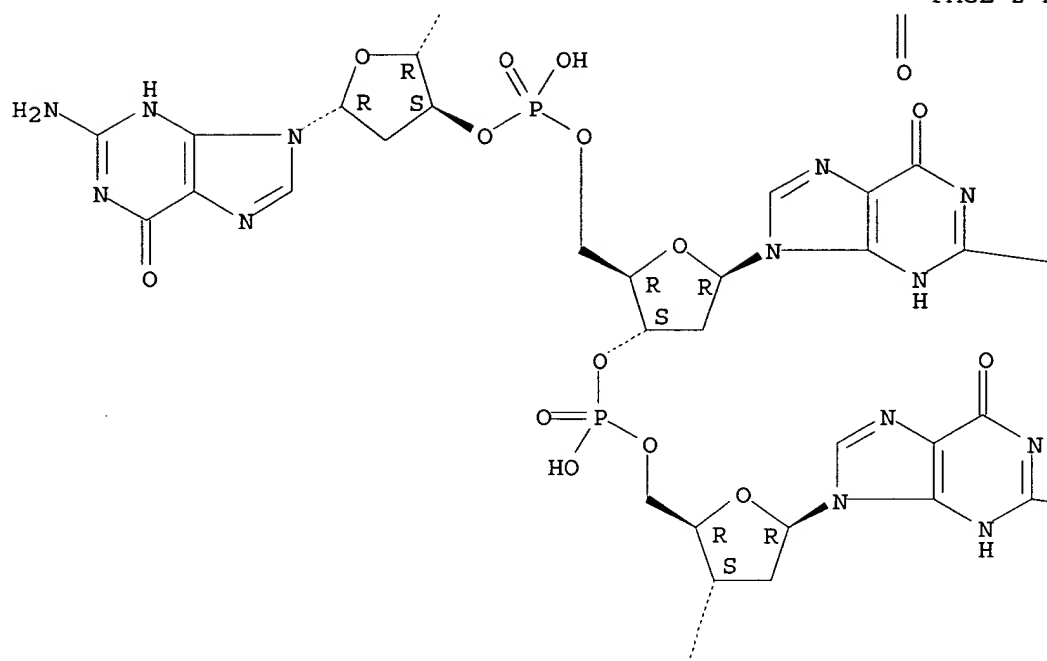
PAGE 3-B



RN 155661-28-2 CAPLUS
 CN α -Thymidine, α -thymidylyl-(3'→5')- α -thymidylyl-
 (3'→5')-2'-deoxy- α -guanylyl-(3'→5')-2'-deoxy- α -
 guanylyl-(3'→5')-2'-deoxy- α -guanylyl-(3'→5')-2'-deoxy-
 α -guanylyl-(3'→5')- α -thymidylyl-(3'→5')- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

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NH₂

NH₂

infectious virus and virus-infected cells to uninfected target cells by binding to the cationic V3 loop of the envelope glycoprotein. The G-quartet structure is a potential candidate for use in anti-HIV chemotherapy.

IT 126208-94-4, ISIS 5671 155661-28-2, ISIS 7283

RL: **BAC** (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); **THU** (Therapeutic use); BIOL (Biological study); USES (Uses)

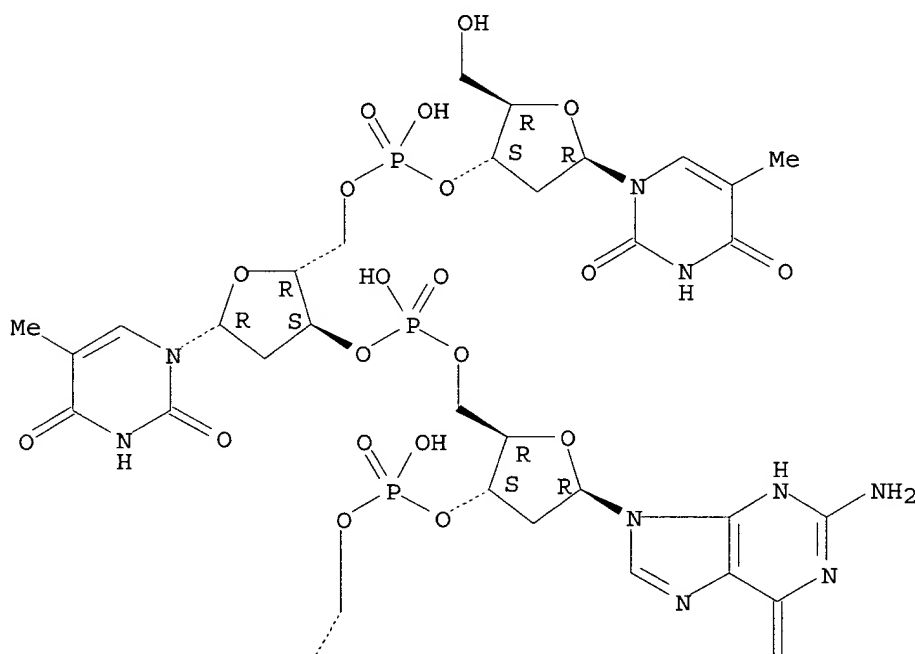
(novel guanosine quartet structure binds to HIV envelope and inhibits envelope mediated cell fusion)

RN 126208-94-4 CAPLUS

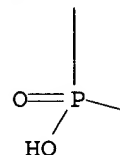
CN Thymidine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

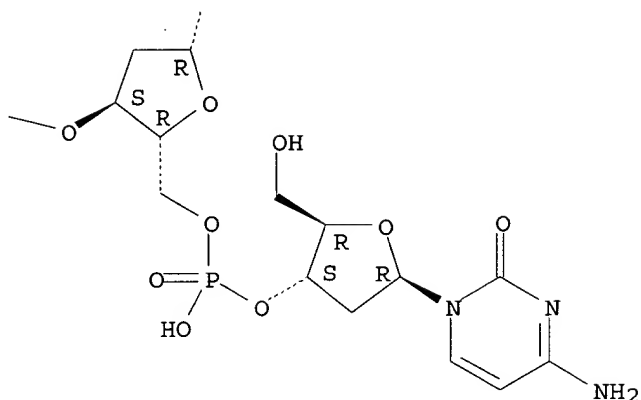
PAGE 1-A



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L46 ANSWER 28 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:631158 CAPLUS

DOCUMENT NUMBER: 123:275263

TITLE: Novel guanosine quartet structure binds to the HIV envelope and inhibits envelope mediated cell fusion

AUTHOR(S): Ecker, David J.; Wyatt, Jacqueline R.; Vickers, Timothy; Buckheit, Robert; Roberson, Joseph; Imbach, Jean-Louis

CORPORATE SOURCE: ISIS Pharmaceuticals, Carlsbad, CA, 92008, USA

SOURCE: Nucleosides & Nucleotides (1995), 14(3-5), 1117-27

CODEN: NUNUD5; ISSN: 0732-8311

PUBLISHER: Dekker

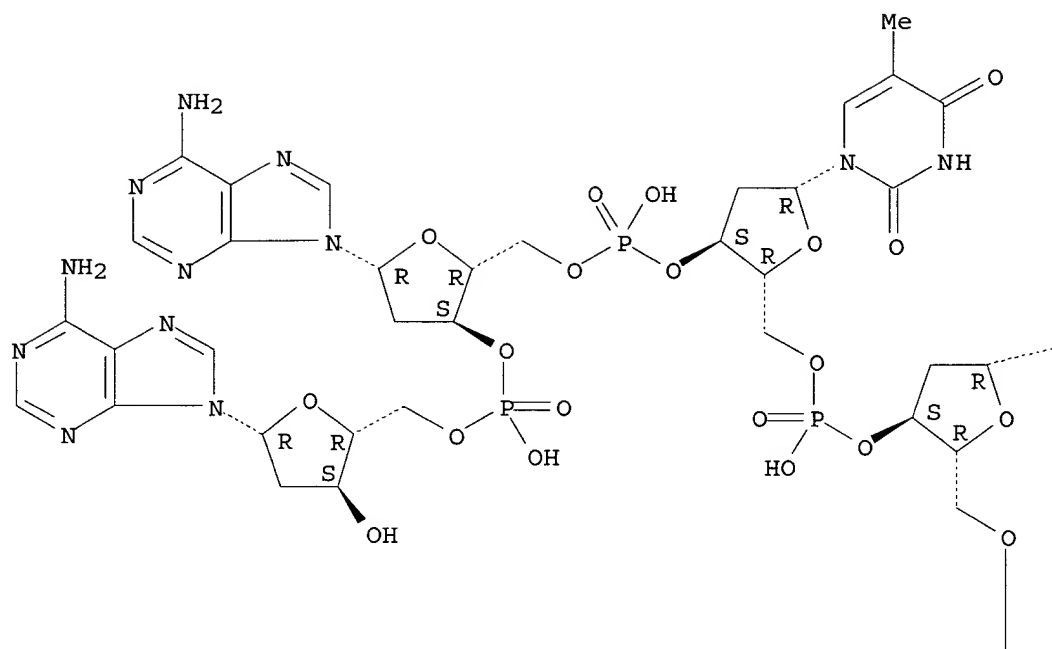
DOCUMENT TYPE: Journal

LANGUAGE: English

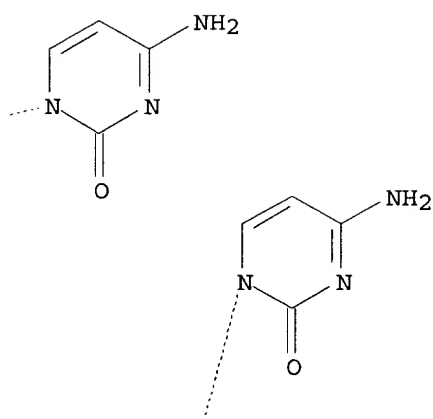
ED Entered STN: 22 Jun 1995

AB The authors have identified a phosphorothioate oligonucleotide T2G4T2 (ISIS 5320), which is a potent inhibitor of HIV infection in vitro. The compound was identified by combinatorial screening of a library of all possible octanucleotide sequences. The oligonucleotide forms a parallel-stranded, tetrameric guanosine-quartet (G-quartet) structure which specifically binds to the HIV envelope glycoprotein (gp 120) and inhibits both cell-to-cell and virus-to-cell infection at submicromolar concns. In the current study the authors demonstrate that the tetramer inhibits the infection of laboratory-derived isolate of HIV-1 and HIV-2 in a variety of phenotypically distinct established human cell lines and a panel of biol. diverse clin. isolates in fresh human peripheral blood lymphocytes and macrophages. The compound was also active against all drug-resistant virus isolates tested. In combination with AZT, ISIS 5320 exhibits additive to slightly synergistic anti-HIV activity. Cell-based mechanism of action studies demonstrate the compound inhibits the binding of

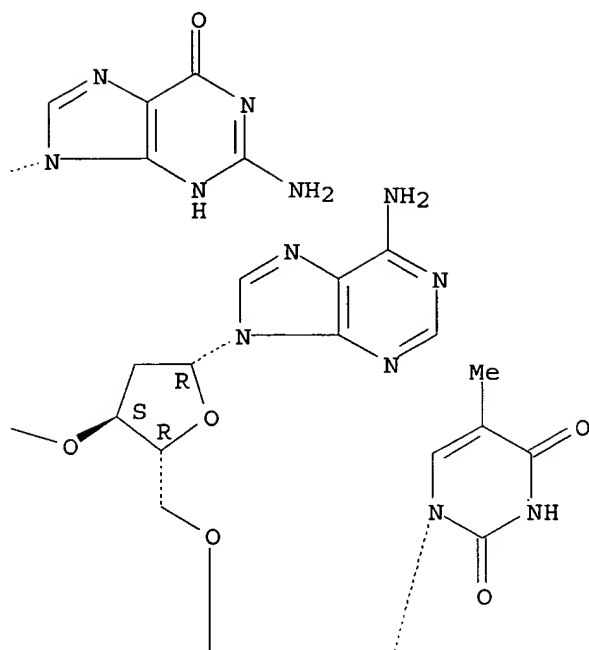
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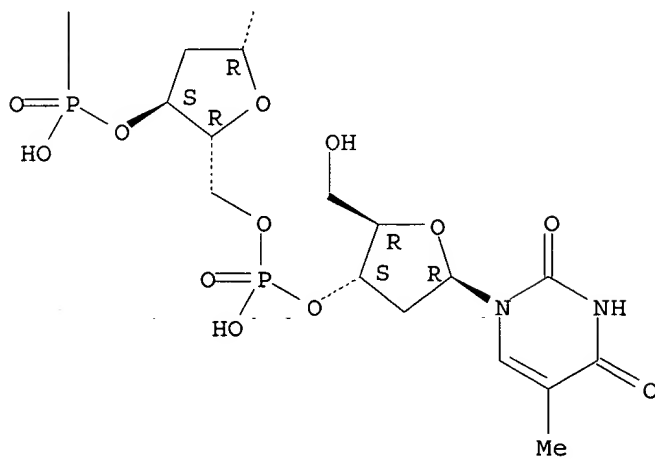
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CM 2

CRN 89802-96-0

CMF C57 H74 N21 O33 P5

Absolute stereochemistry.

go through from .apprx.50 to .apprx.60. Cells incubated with the oligonucleotide TTAGGGTTAGGG 1.0 μ M stopped dividing with the maximum number of doublings <10. The lengths of telomeres were shown to be a function of the proliferative history of a cell and so they could be used as markers in the assessment of senescence, e.g. in atherogenesis. Telomere loss was more rapid in cultured cells derived from Down's syndrome patients (133 ± 15 bp/y) than from age-matched controls (41 ± 7.7 bp/y).

IT 157961-44-9D, oligomers

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(as primer for telomerase assay; determination of telomere length and telomerase activity and their use in diagnosis and treatment of disease)

RN 157961-44-9 CAPLUS

CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy-, double-stranded complementary (9CI) (CA INDEX NAME)

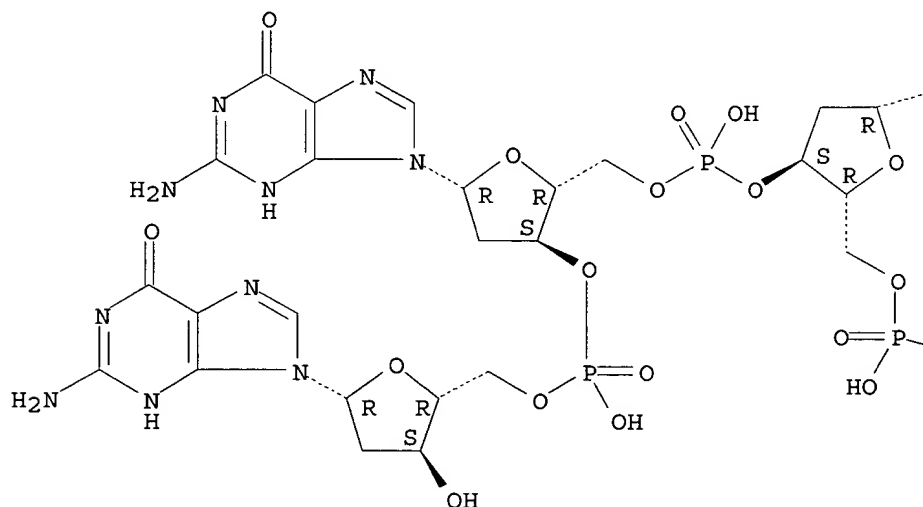
CM 1

CRN 117490-04-7

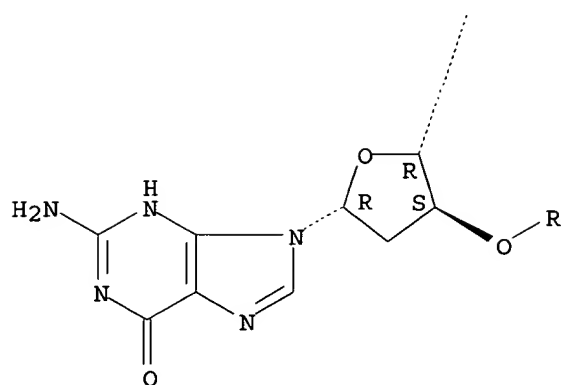
CMF C60 H75 N24 O35 P5

Absolute stereochemistry.

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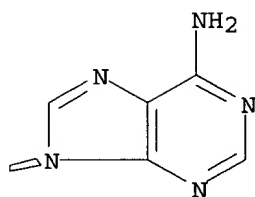
L46 ANSWER 27 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:780399 CAPLUS
 DOCUMENT NUMBER: 123:190561
 TITLE: Determination of telomere length and telomerase activity and their use in the diagnosis and treatment of disease
 INVENTOR(S): West, Michael David; Shay, Jerry; Blackburn, Elizabeth H.; Kim, Nam Woo; Wright, Woodring E.; Harley, Calvin B.; Weinrich, Scott L.; Strahl, Catherine M.; McEachern, Michael J.; Vaziri, Homayoun
 PATENT ASSIGNEE(S): Geron Corp., USA; Board of Regents, University of Texas System; Regents of the University of California
 SOURCE: PCT Int. Appl., 228 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 21
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------|
| WO 9513382 | A1 | 19950518 | WO 1994-US13122 | 19941114 |
| W: AU, CA, JP | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5830644 | A | 19981103 | US 1993-151477 | 19931112 |
| AU 9511781 | A1 | 19950529 | AU 1995-11781 | 19941114 |
| PRIORITY APPLN. INFO.: | | | US 1993-151477 | A 19931112 |
| | | | US 1992-882438 | B2 19920513 |
| | | | US 1993-38766 | A2 19930324 |
| | | | US 1993-60952 | A2 19930513 |
| | | | WO 1994-US13122 | W 19941114 |

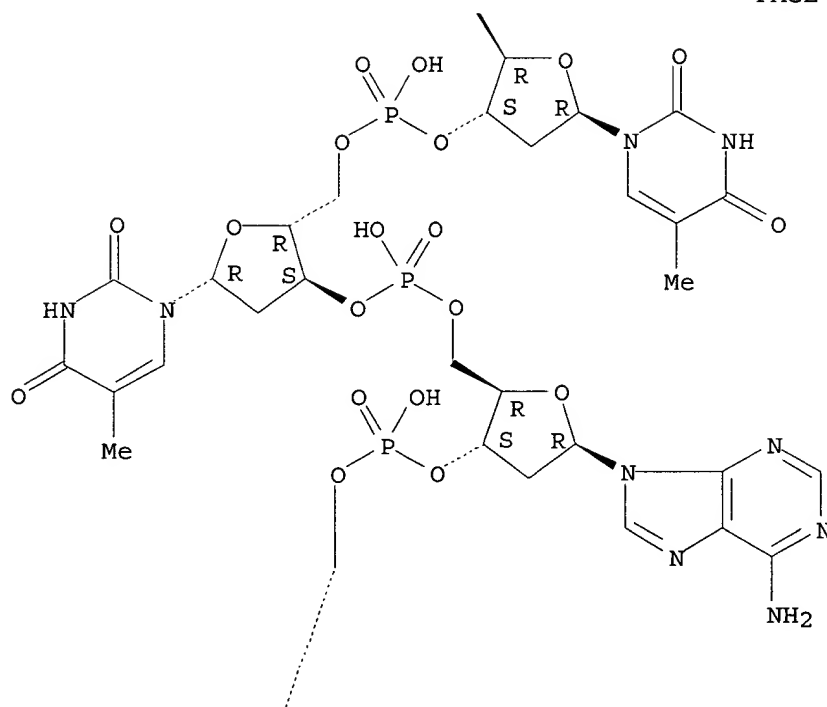
ED Entered STN: 08 Sep 1995

AB Methods and reagents for the determination of telomere length and telomerase activity, as well as the ability to increase or decrease telomerase activity in the treatment of proliferative diseases are described. A primer extension method used under conditions that minimize interference from other genomic sequences is used to obtain accurate detns. of telomeric length or telomerase activity. In addition, compns. are provided for intracellular inhibition of telomerase activity and means are shown for slowing or reversing the loss of telomeric repeats in aging cells. Primers hybridizing to the single-stranded region of the telomere were shown to increase the number of divisions that non-immortalized cells could

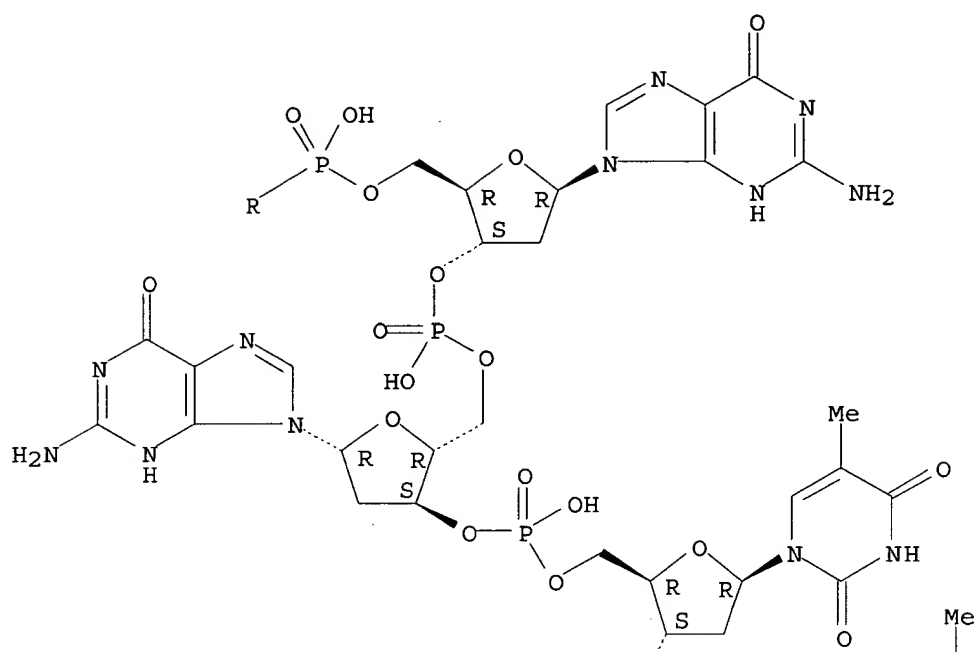
PAGE 2-B



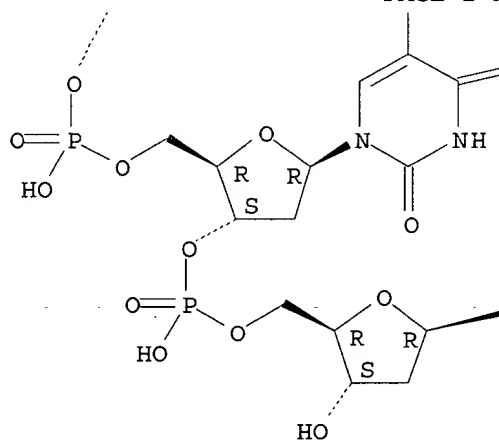
PAGE 3-A



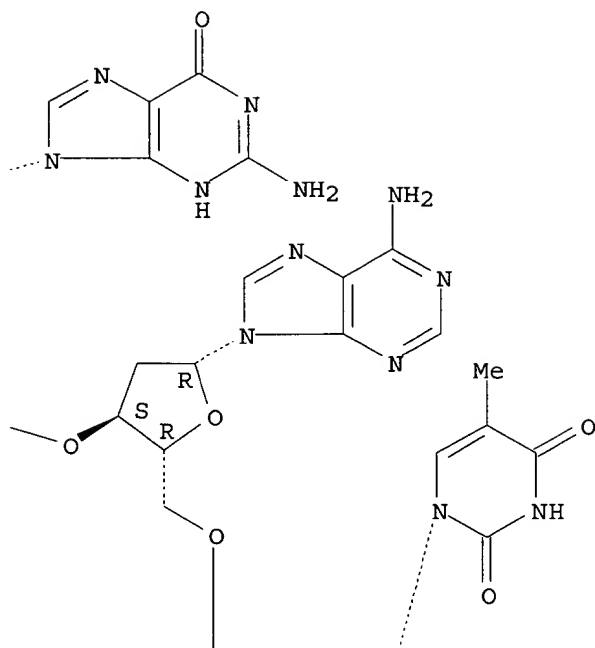
PAGE 1-A



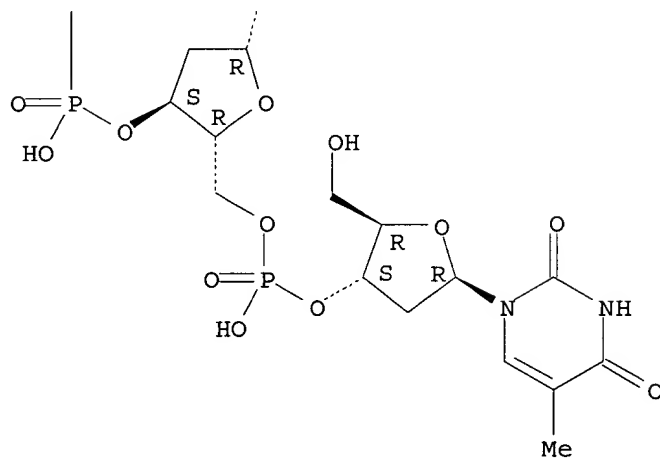
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RN 125443-46-1 CAPLUS

CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 US 5645986 A 19970708 US 1993-153051 19931112
 US 5830644 A 19981103 US 1993-151477 19931112
 AU 9513307 A1 19950529 AU 1995-13307 19941110
 PRIORITY APPLN. INFO.: US 1993-151477 A 19931112
 US 1993-153051 A 19931112
 US 1992-882438 B2 19920513
 US 1993-38766 A2 19930324
 US 1993-60952 A2 19930513
 WO 1994-US13130 W 19941110

ED Entered STN: 20 Sep 1995

AB Method and compns. for increasing telomere length in normal cells can be used to increase the proliferative capacity of cells and to delay the onset of cellular senescence. The method comprises culturing the cells in the presence of an oligonucleotide substrate for telomerase. The substrate contains a telomeric repeat sequence. A human fibroblast cell line treated as above displayed increased telomere length. A correlation between telomere length and cell lifespan was demonstrated using hybrid cells.

IT 117490-04-7 125443-46-1

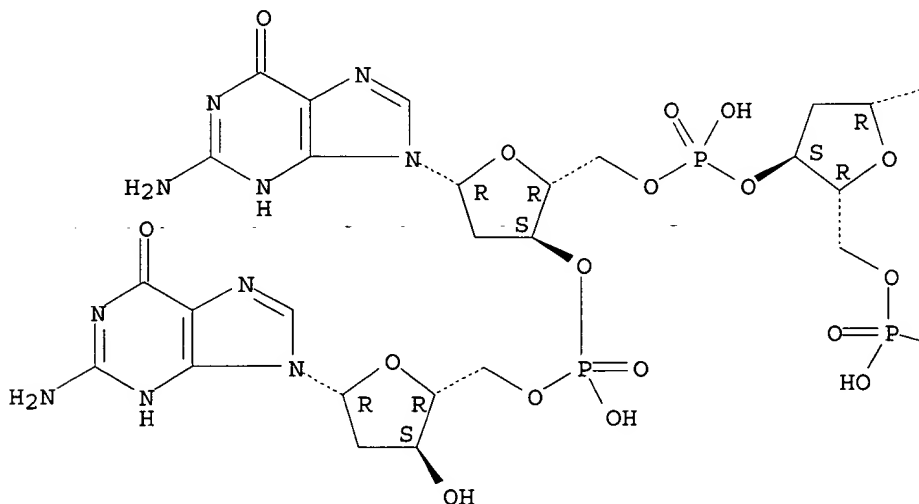
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (telomerase substrate; methods and reagents for lengthening telomeres in normal cells and delaying onset of cellular senescence)

RN 117490-04-7 CAPLUS

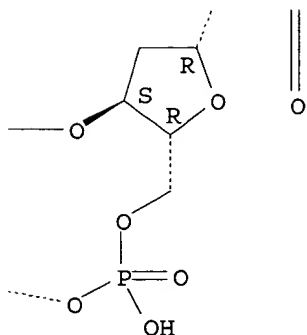
CN Guanosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

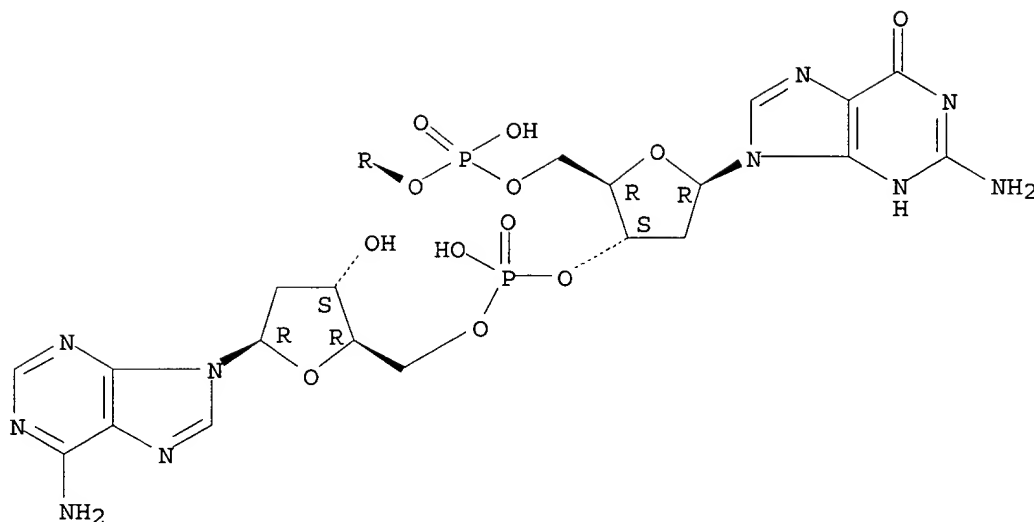
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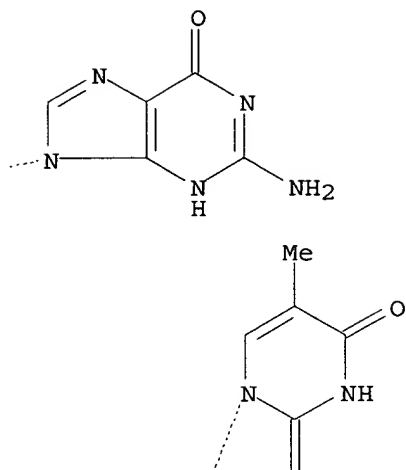
PAGE 3-A



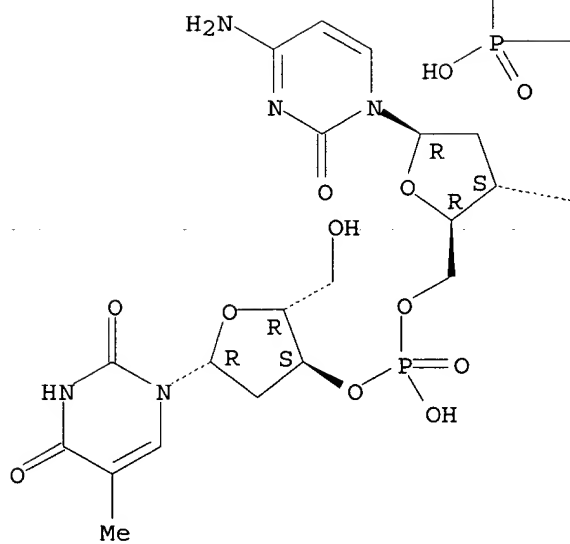
L46 ANSWER 26 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:801573 CAPLUS
 DOCUMENT NUMBER: 123:220261
 TITLE: Methods and reagents for lengthening telomeres in normal cells and delaying onset of cellular senescence
 INVENTOR(S): Shay, Jerry; West, Michael David; Wright, Woodring E.
 PATENT ASSIGNEE(S): Geron Corp., USA; Board of Regents, University of Texas System
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 21
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 9513383 | A1 | 19950518 | WO 1994-US13130 | 19941110 |
| W: AU, CA, JP | | | | |

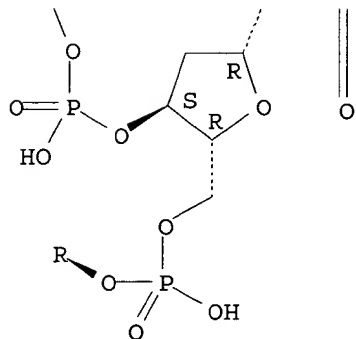
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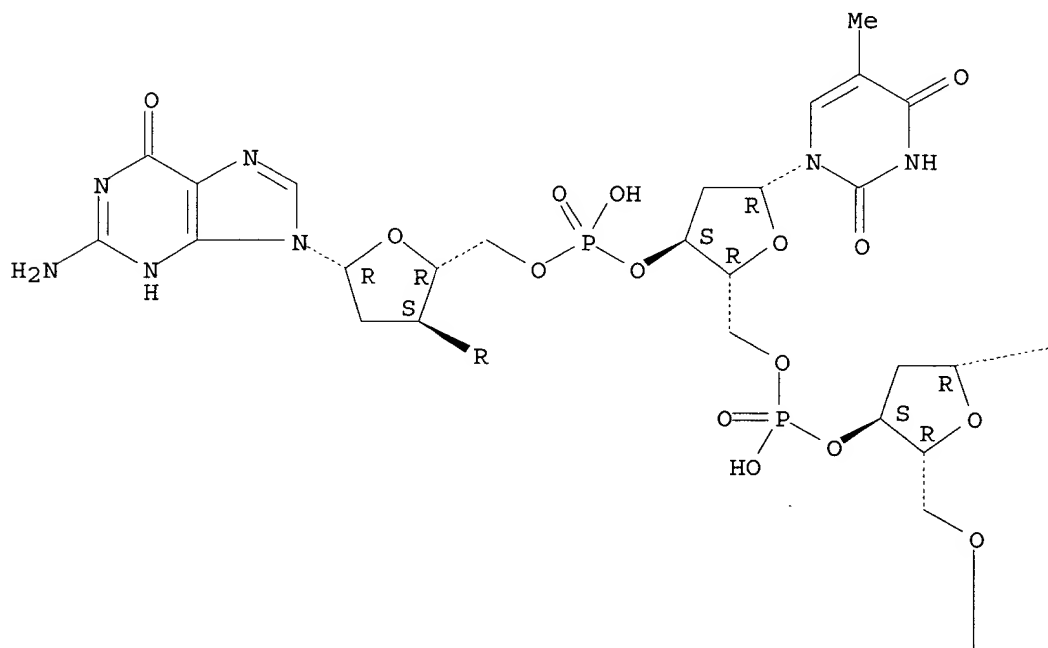


RN 173264-68-1 CAPLUS

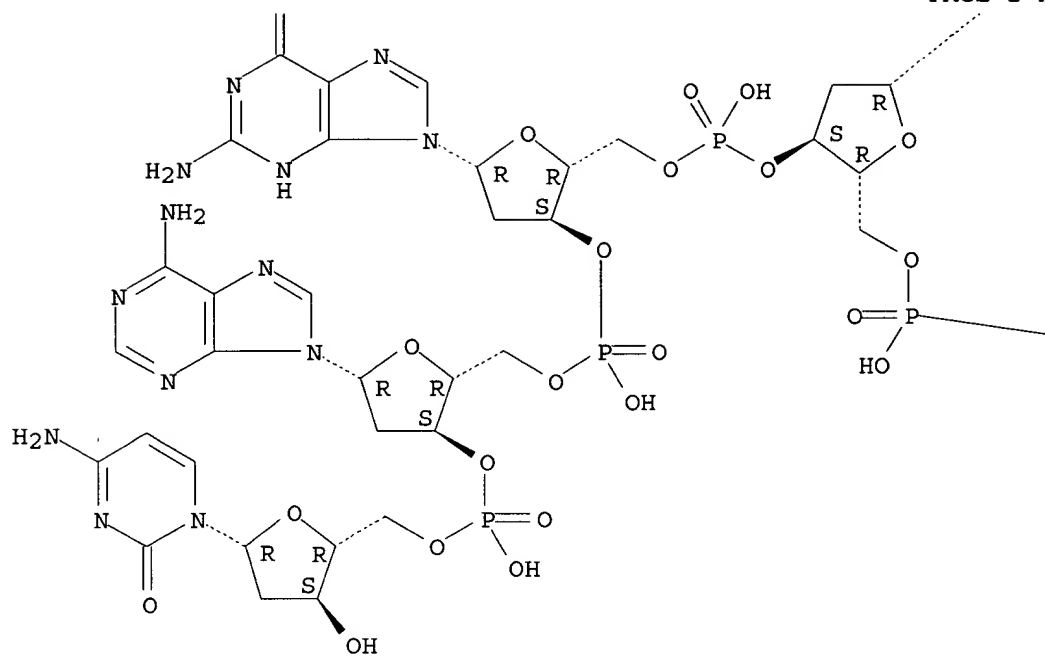
CN Adenosine, thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

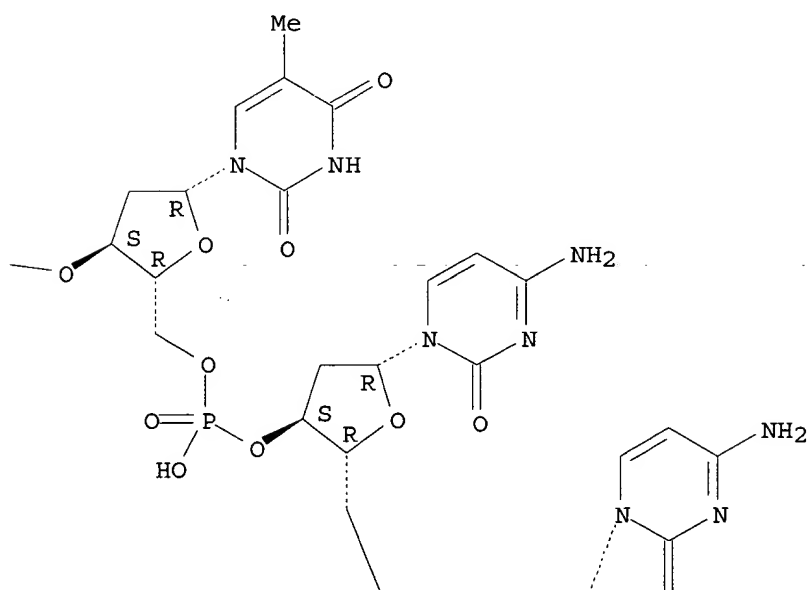
PAGE 1-A



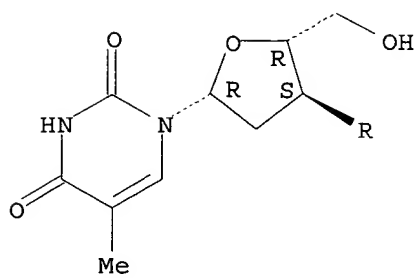
PAGE 2-A



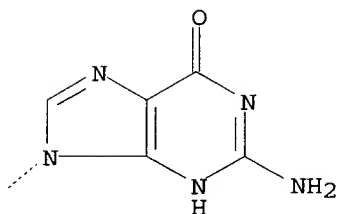
PAGE 2-B



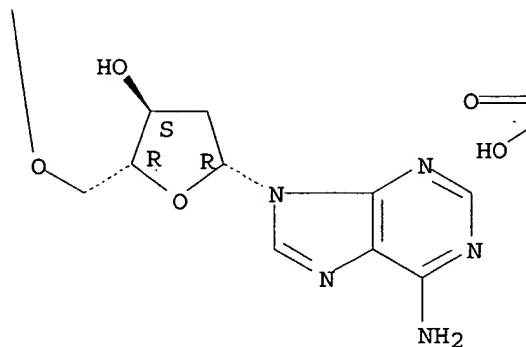
PAGE 1-A



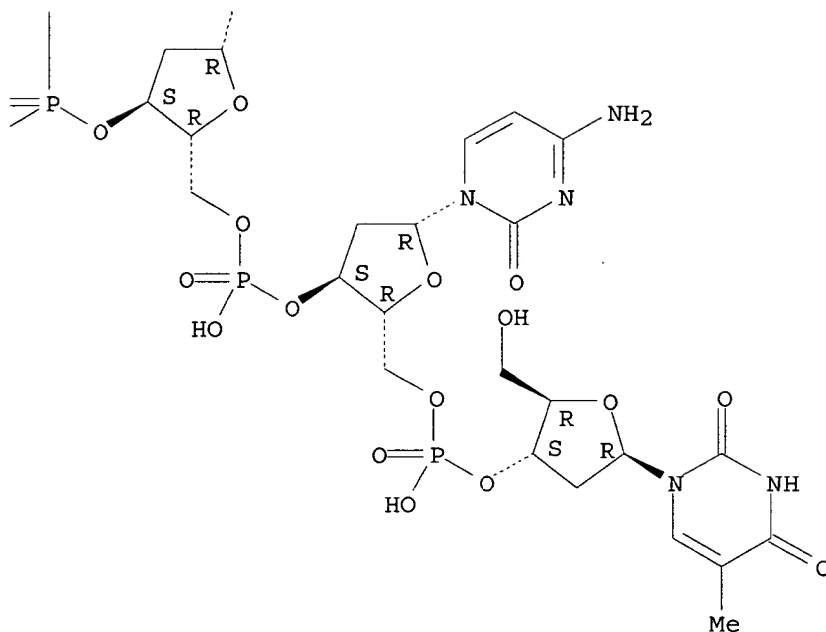
PAGE 1-B



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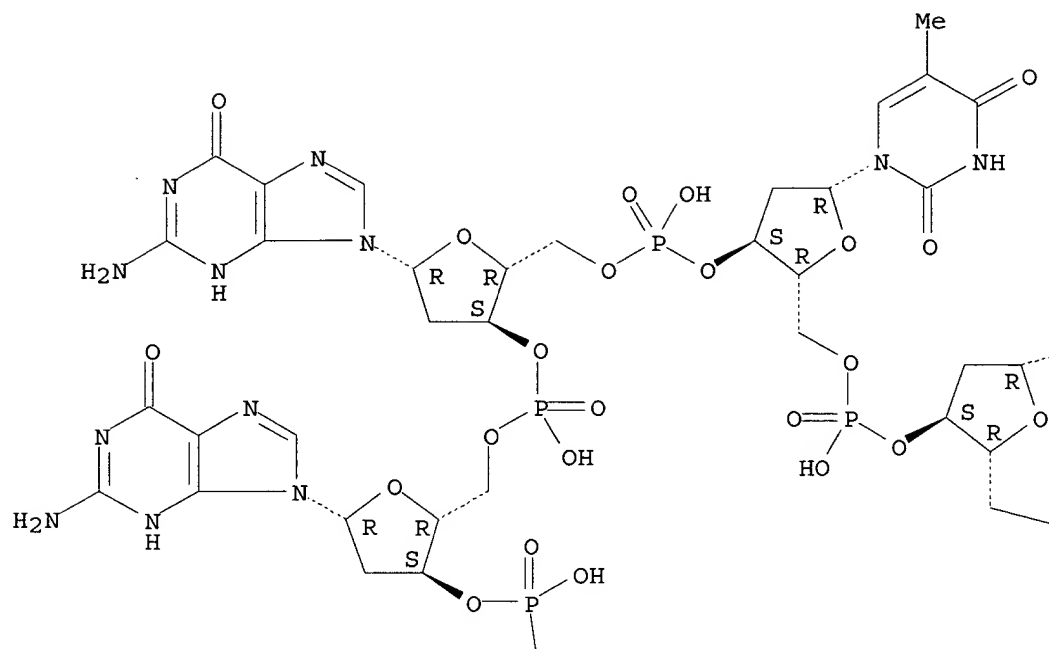
PAGE 2-B



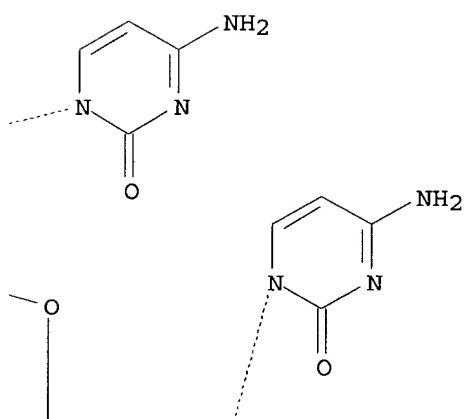
RN 173264-67-0 CAPLUS
 CN Cytidine, thymidyl- (3'→5')-2'-deoxycytidyl- (3'→5')-2'-
 deoxycytidyl- (3'→5')-thymidyl- (3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl- (3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

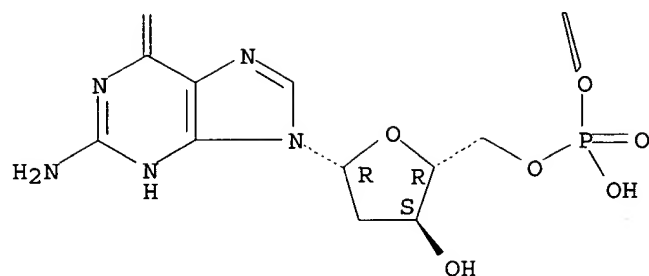
PAGE 1-A



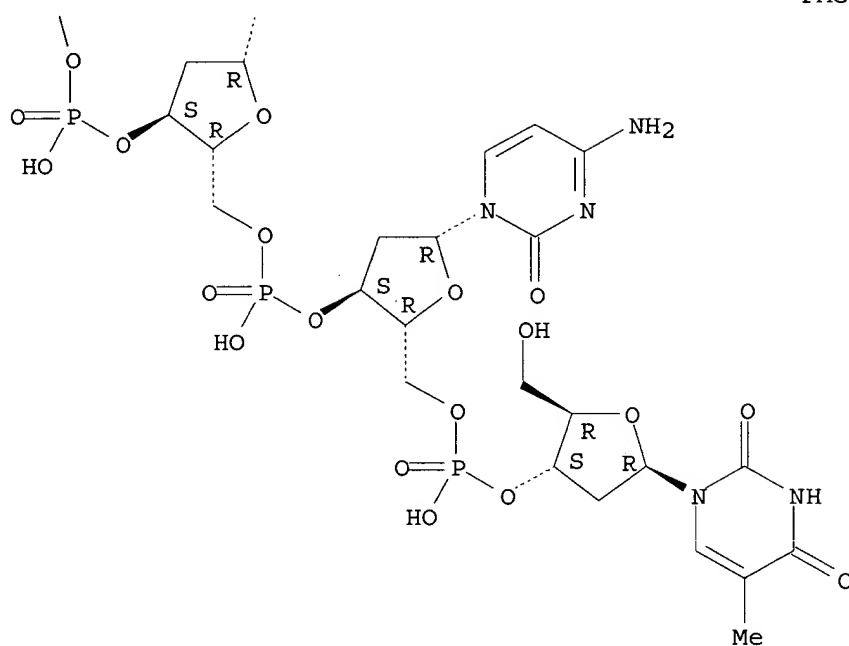
PAGE 1-B



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PAGE 2-B

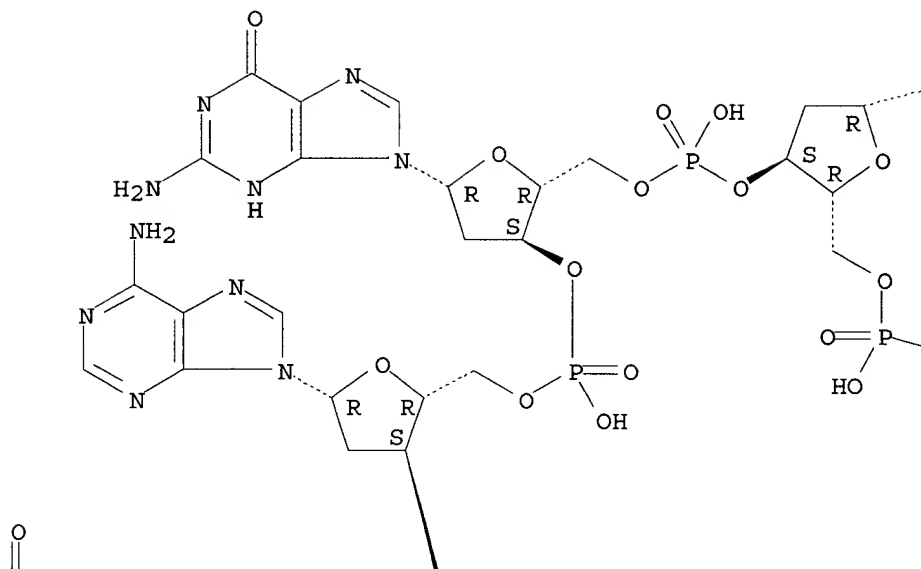


RN 173264-66-9 CAPLUS

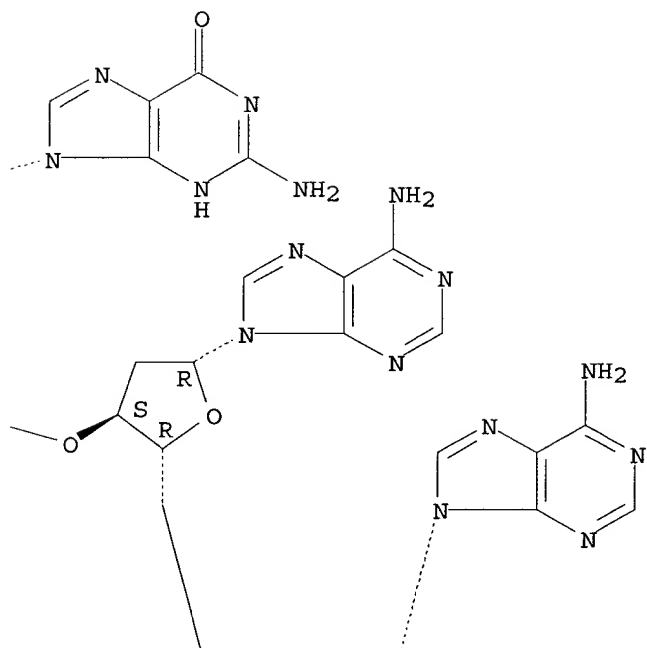
CN Adenosine, thymidyl-(3'→5')-2'-deoxycytidyl-(3'→5')-2'-
deoxycytidyl-(3'→5')-2'-deoxycytidyl-(3'→5')-thymidyl-(
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

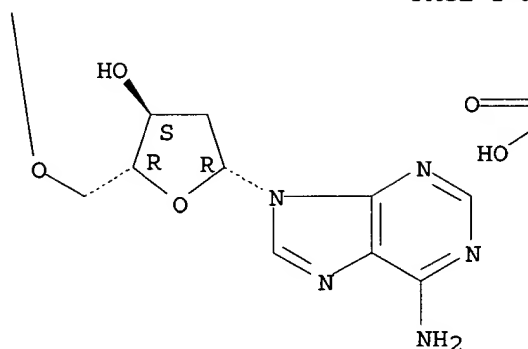
PAGE 1-A



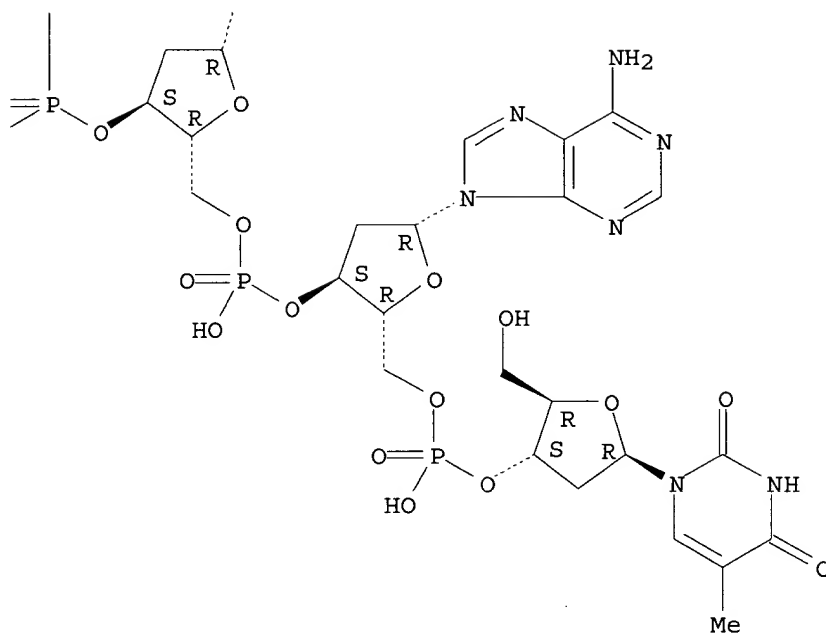
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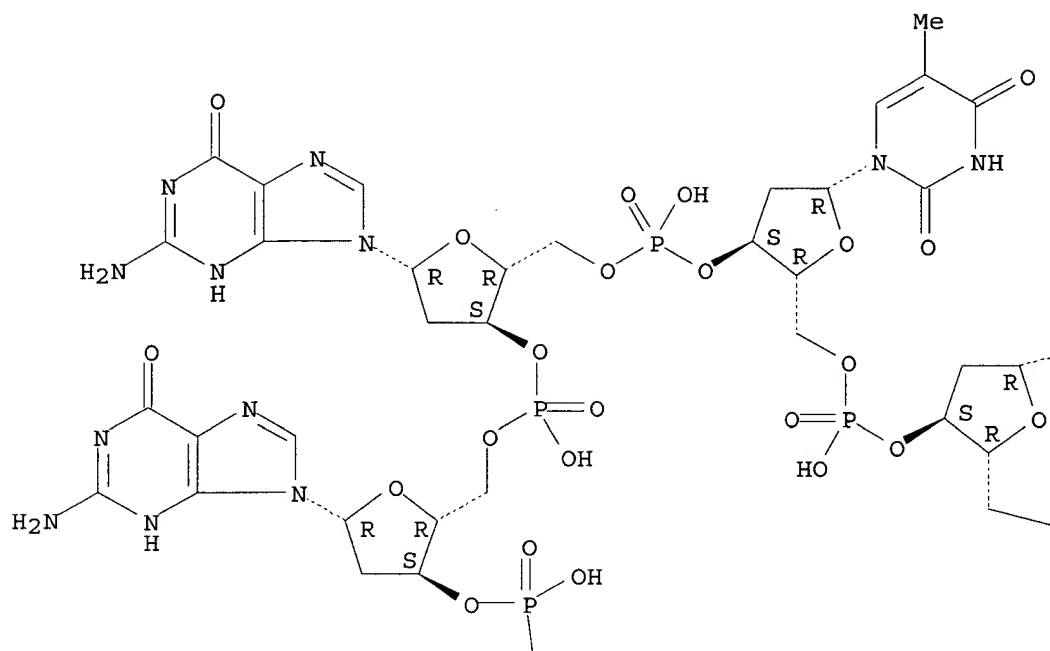


RN 173264-63-6 CAPLUS

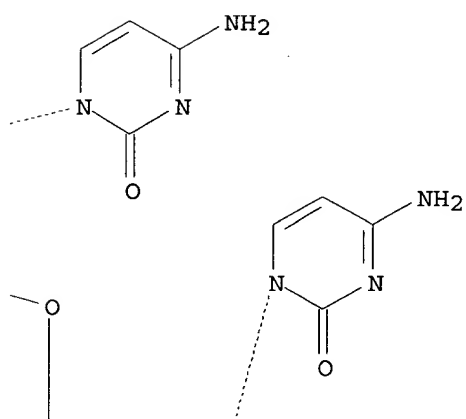
CN Guanosine, thymidyl- (3'→5')-2'-deoxycytidyl- (3'→5')-2'-
 deoxyadenyl- (3'→5')-2'-deoxyadenyl- (3'→5')-2'-
 deoxyguanylyl- (3'→5')-2'-deoxyguanylyl- (3'→5')-2'-
 deoxyadenyl- (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

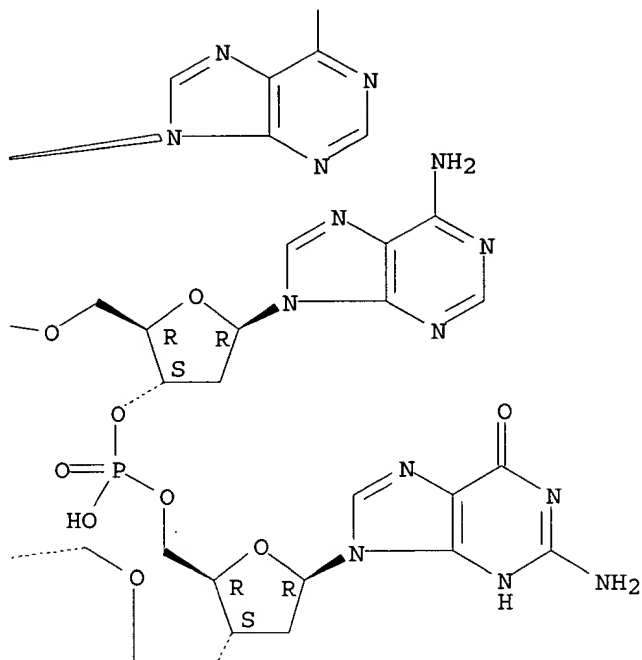
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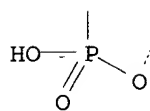
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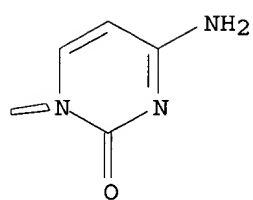
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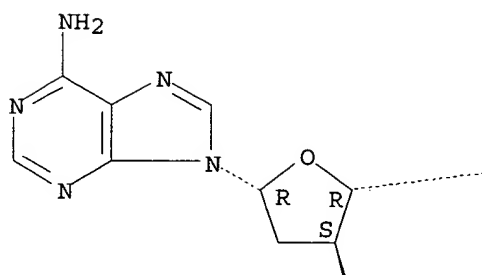
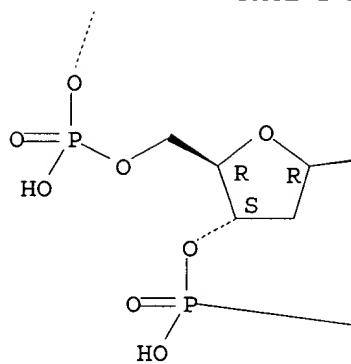
RN 173264-61-4 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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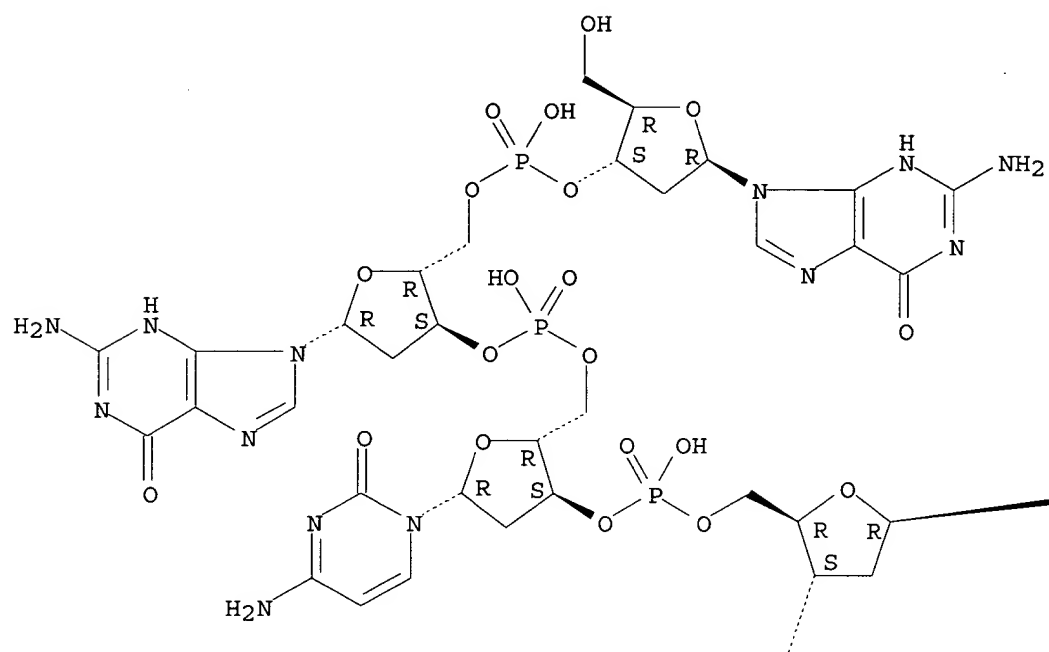


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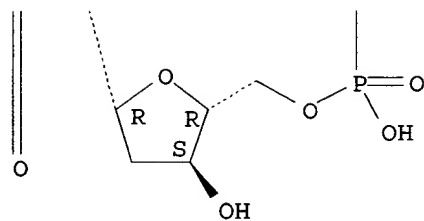


Absolute stereochemistry.

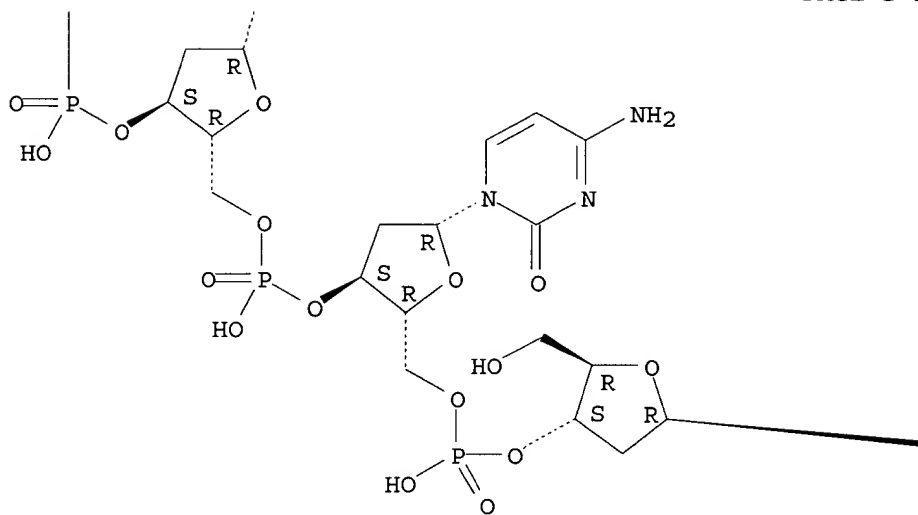
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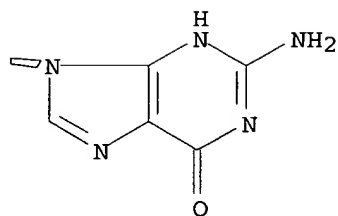
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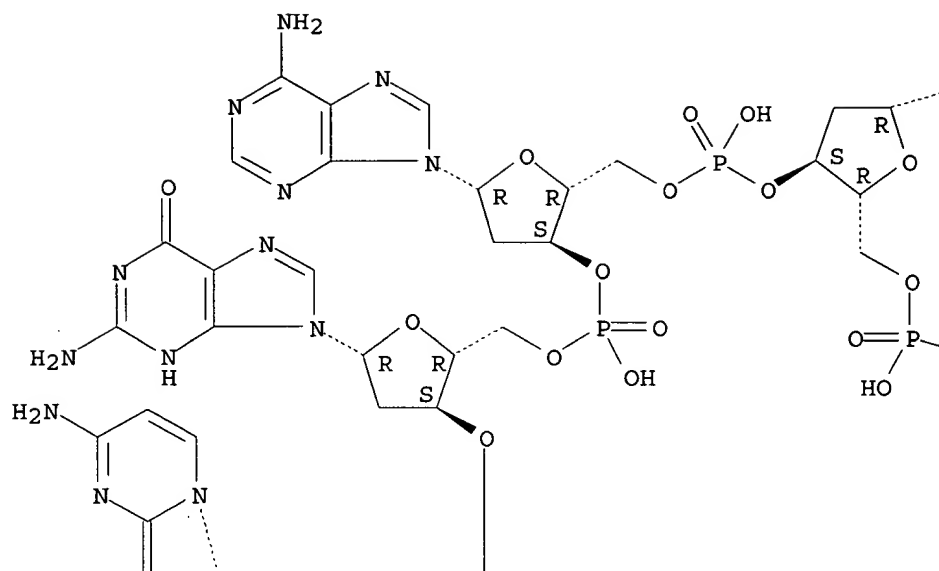
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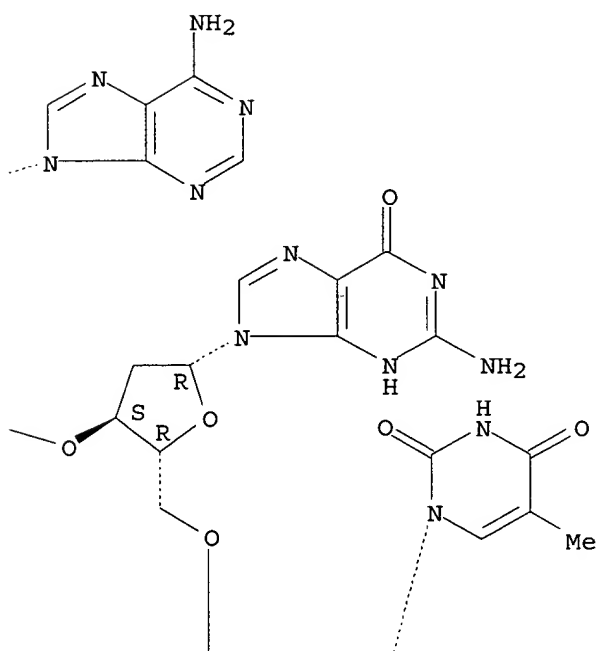
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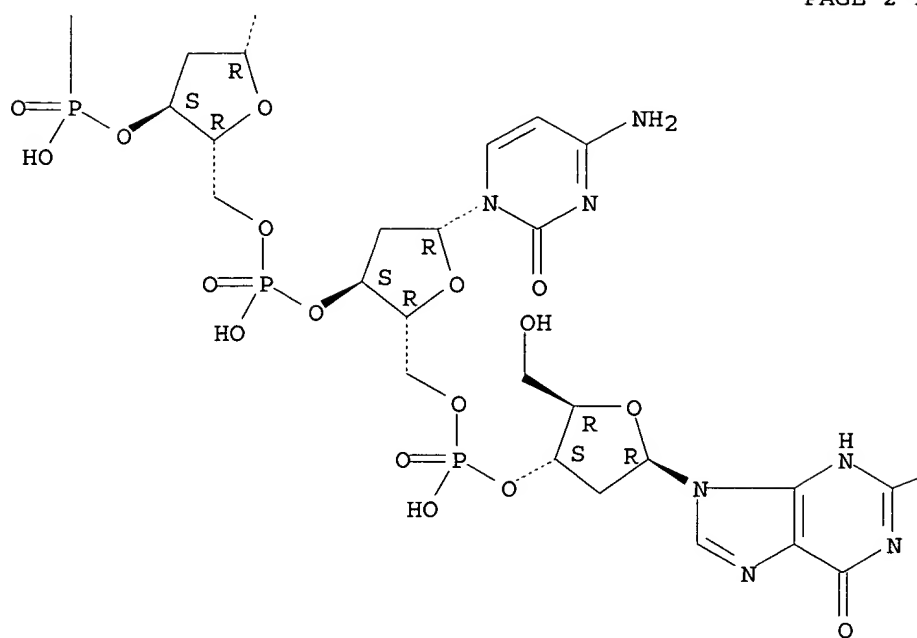
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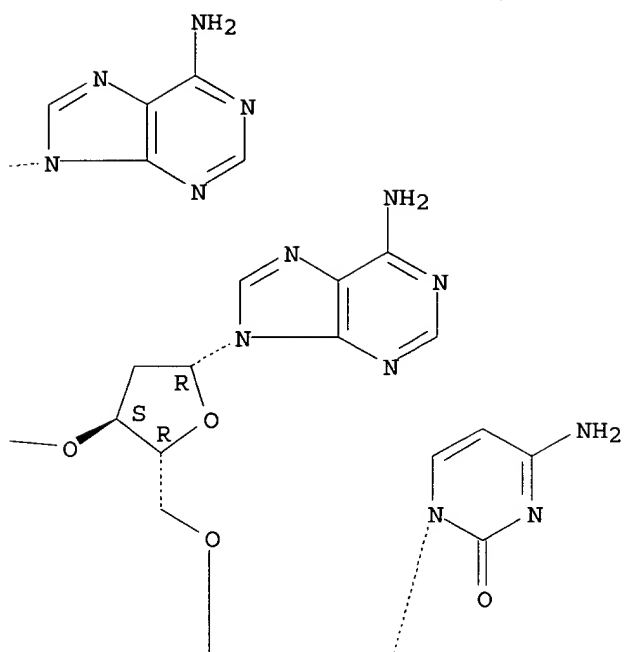
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—NH₂

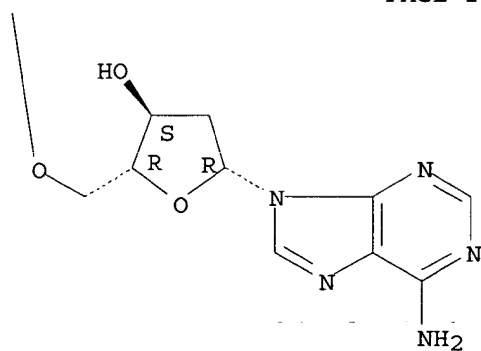
RN 173264-47-6 CAPLUS
 CN Cytidine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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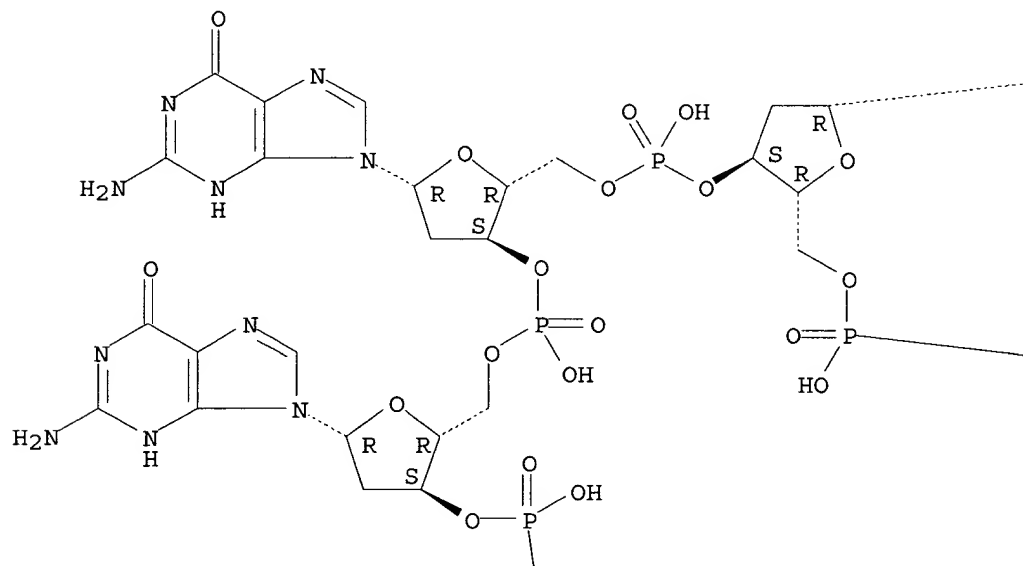
—NH₂

RN 173264-46-5 CAPLUS

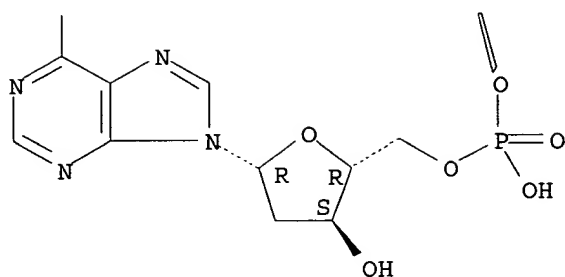
CN Adenosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

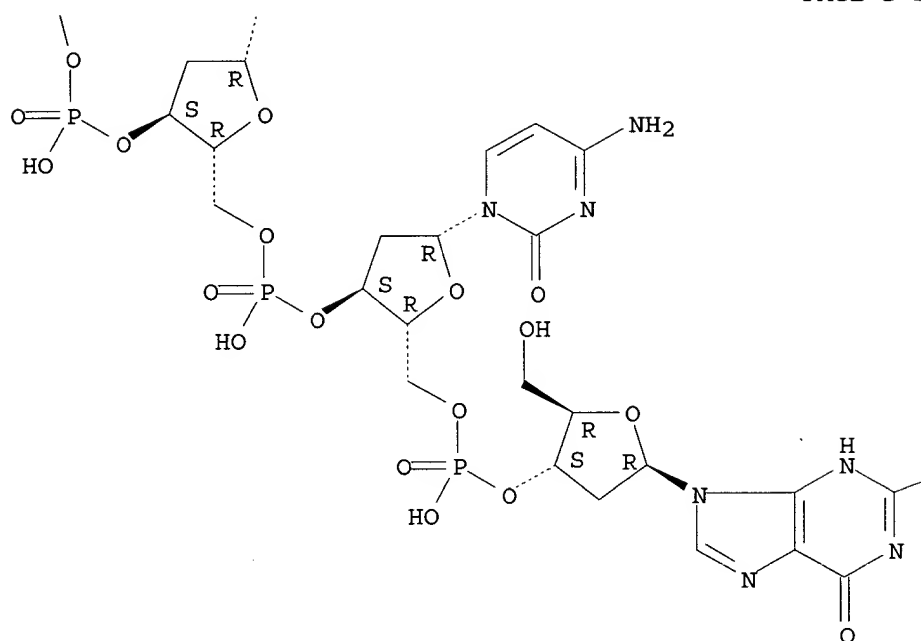
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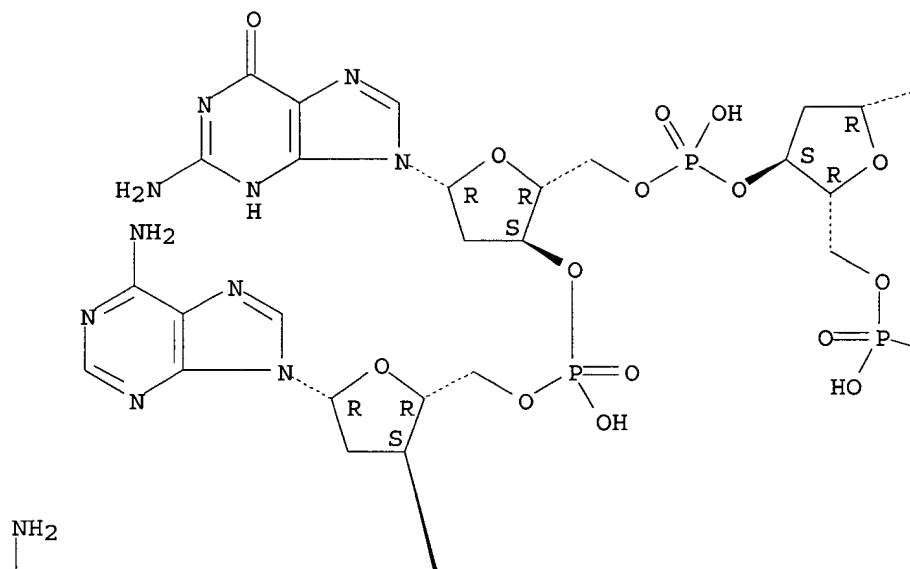


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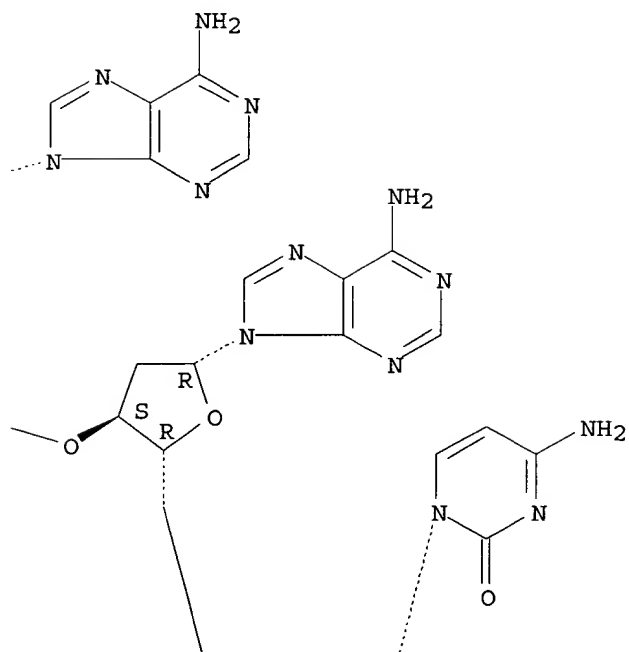


Absolute stereochemistry.

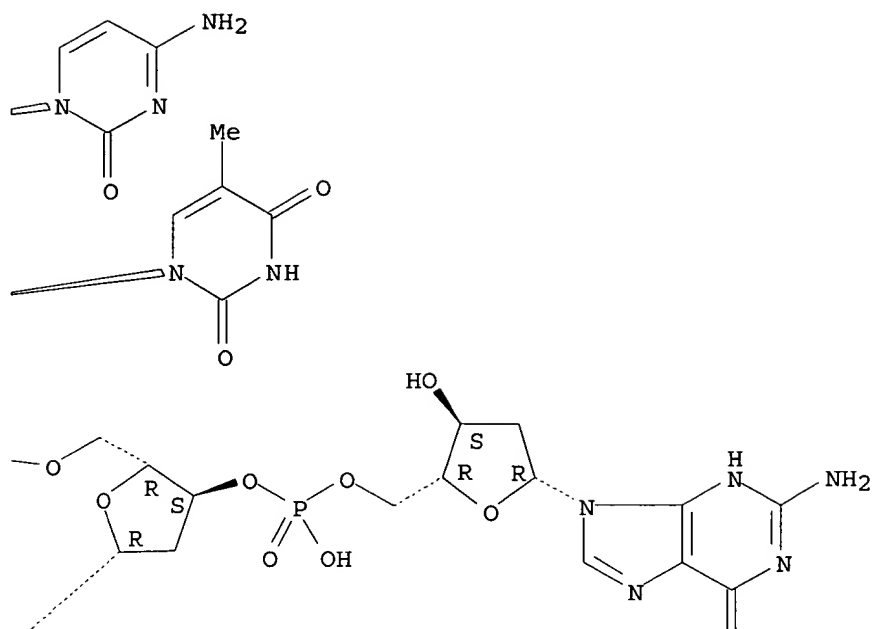
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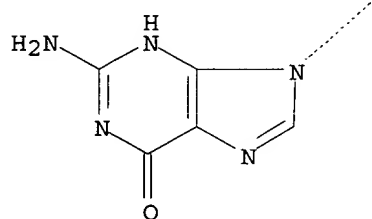
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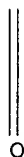
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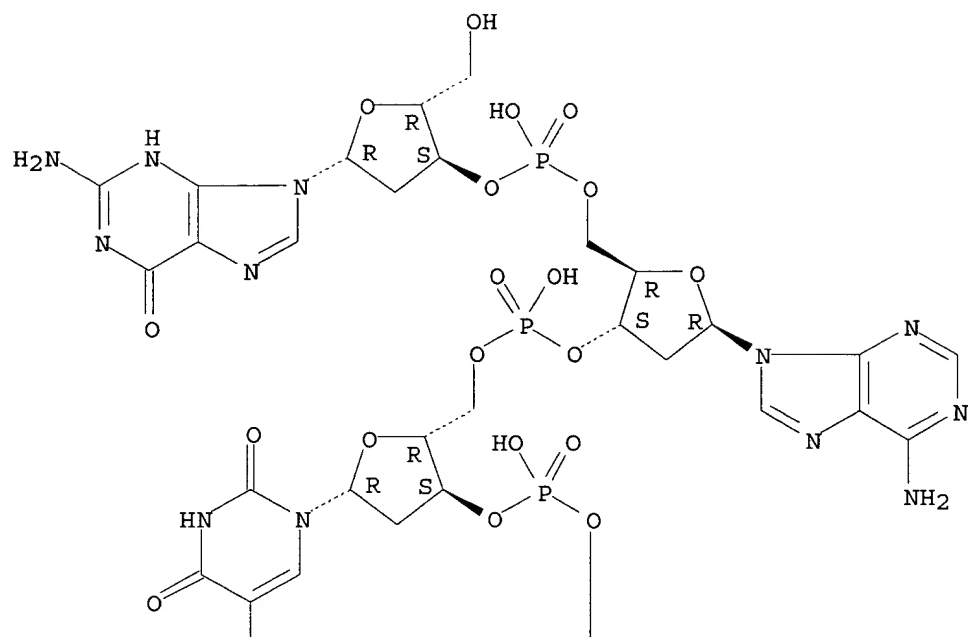


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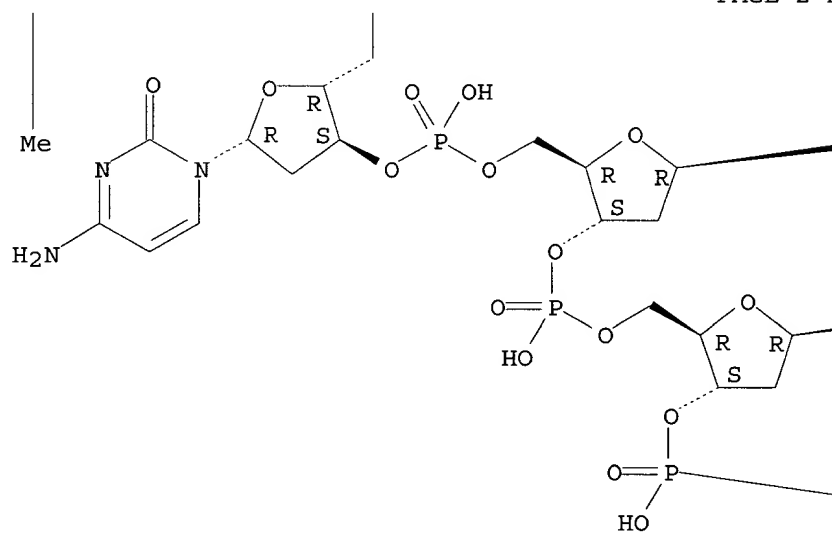


RN 173264-45-4 CAPLUS
 CN Adenosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

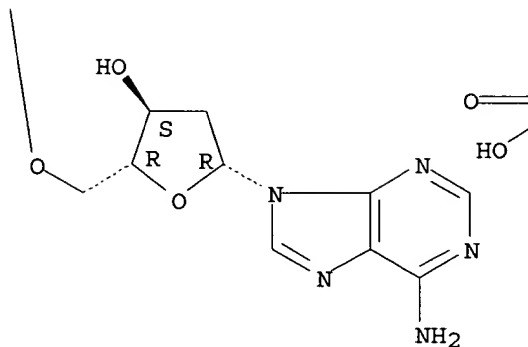
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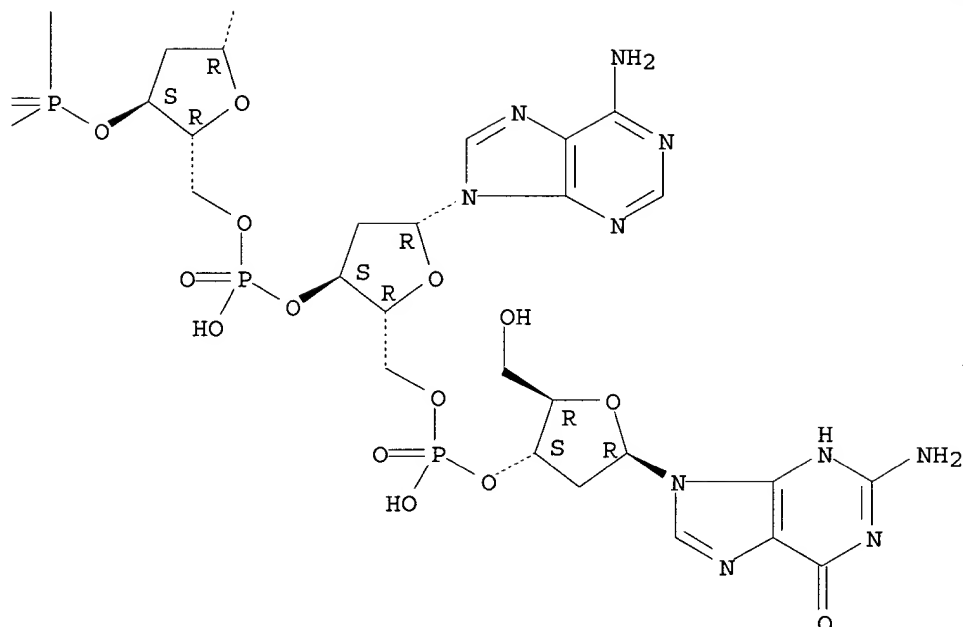
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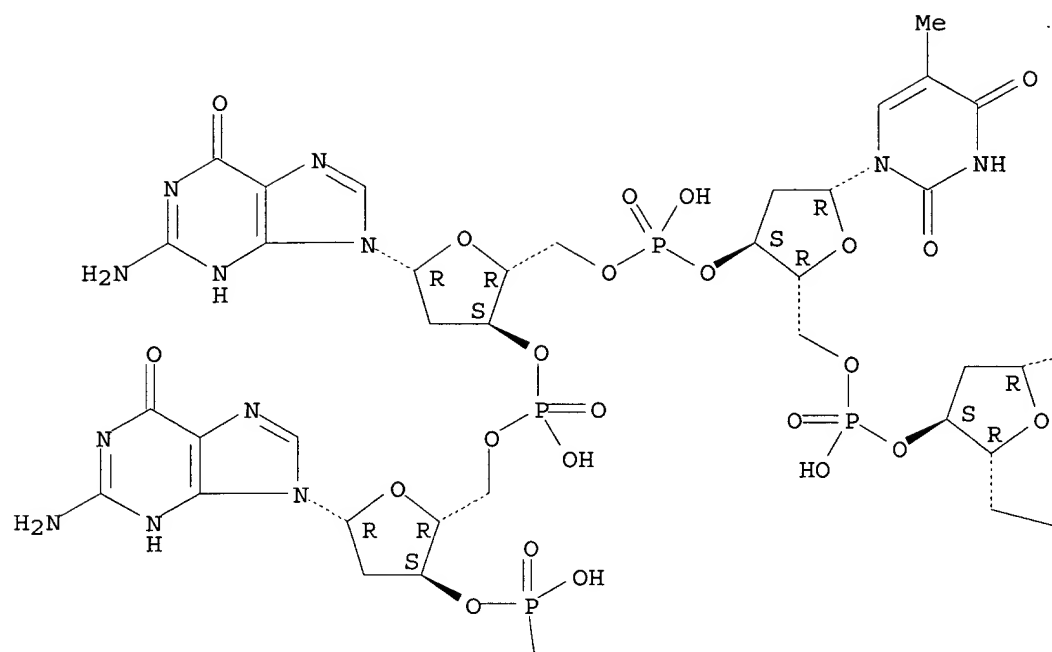


RN 173264-41-0 CAPLUS

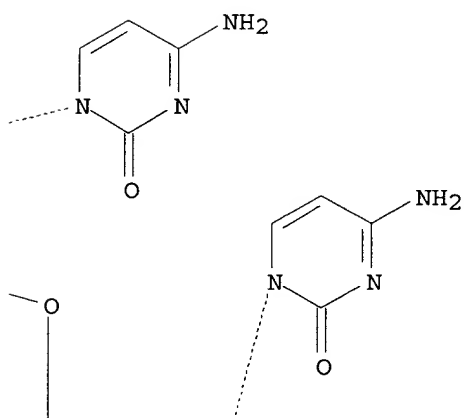
CN Guanosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

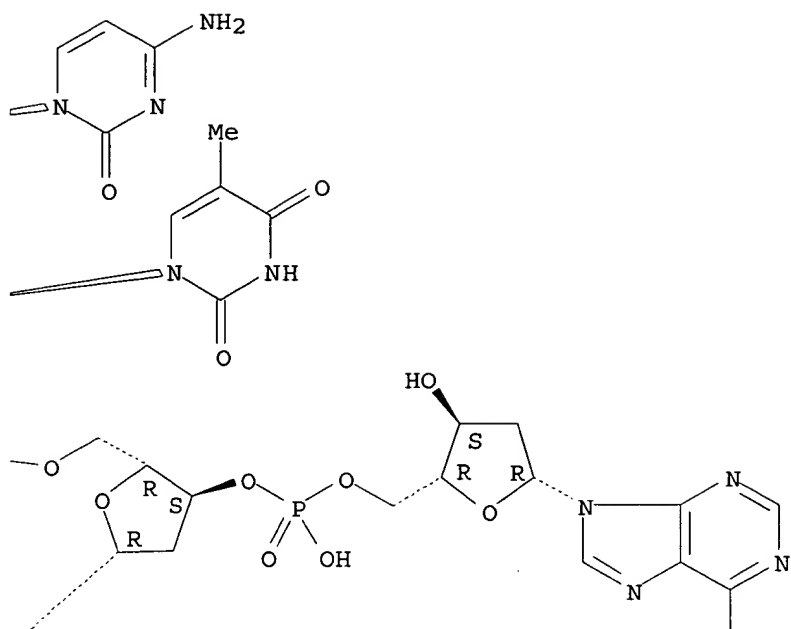
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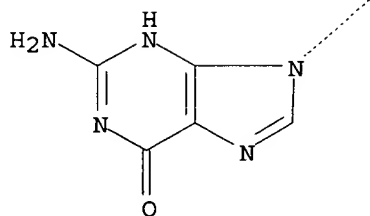
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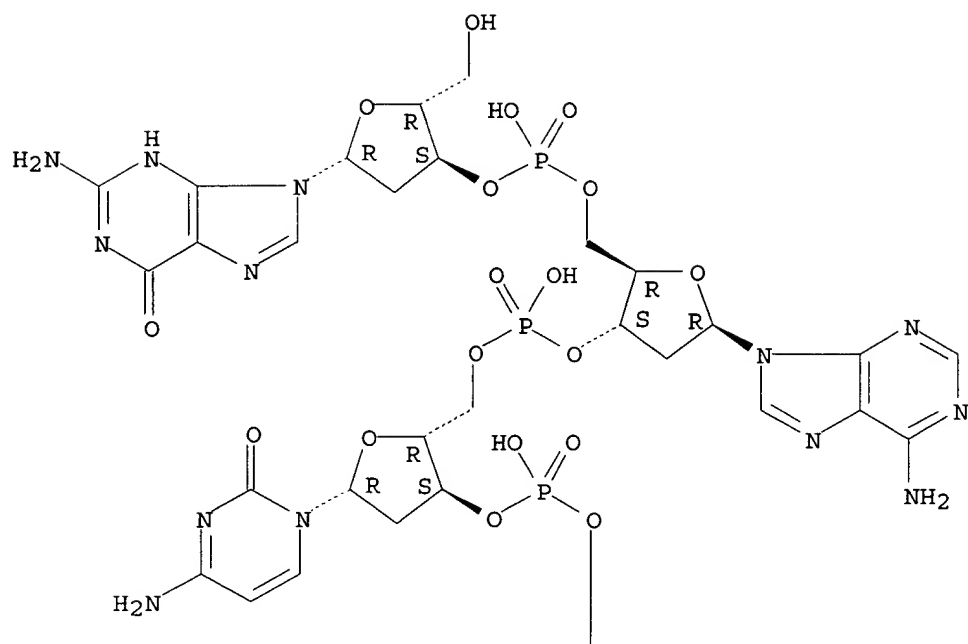


RN 173264-34-1 CAPLUS
 CN Adenosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

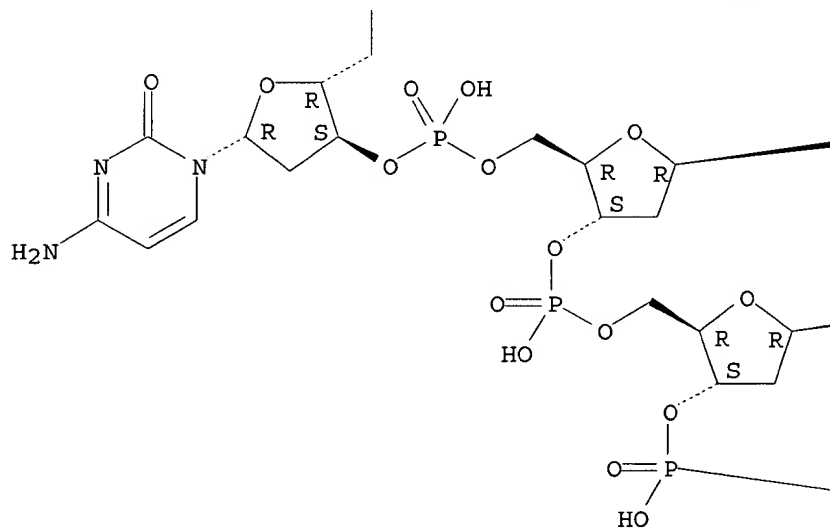
Absolute stereochemistry.

Searched by Barb O'Bryen, STIC 2-2518

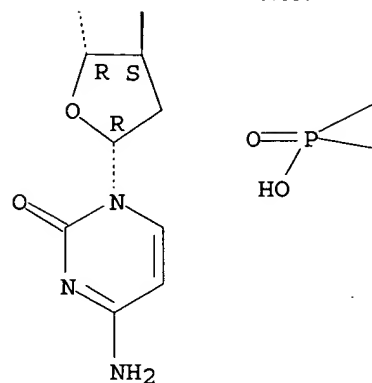
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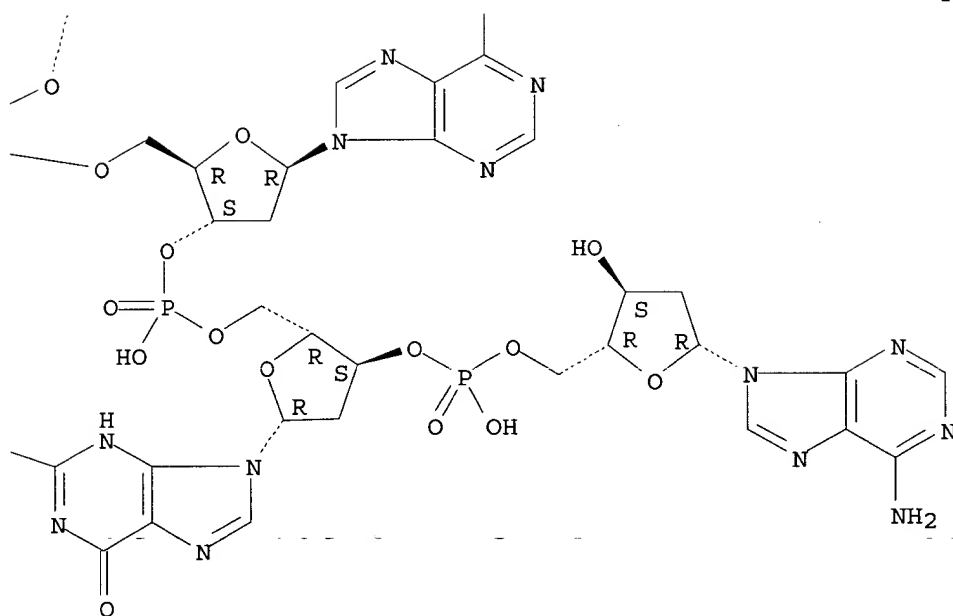
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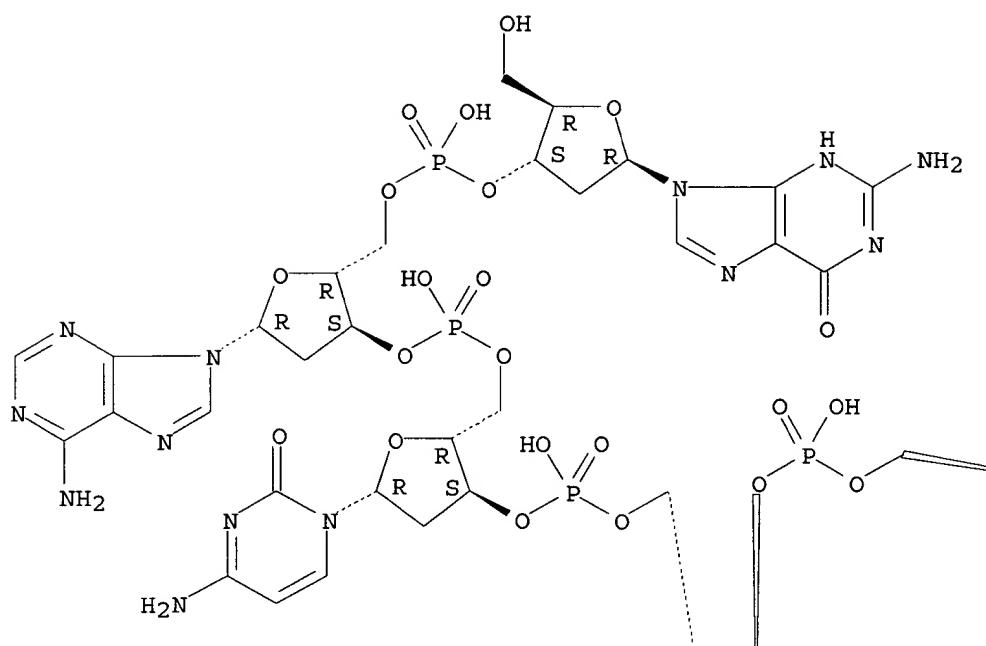


RN 173264-32-9 CAPLUS

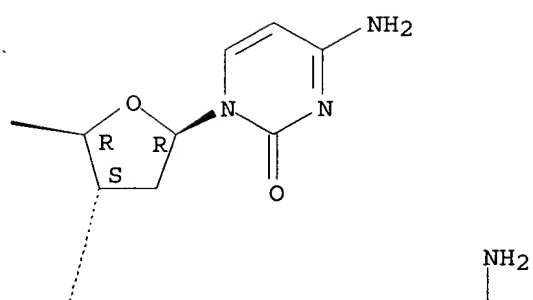
CN Adenosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

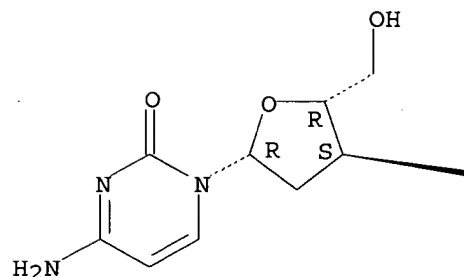
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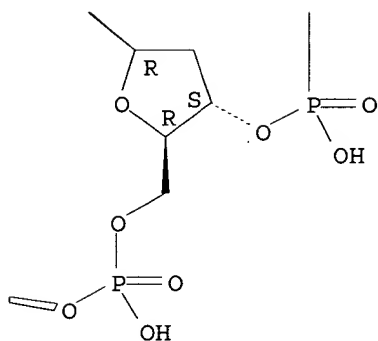
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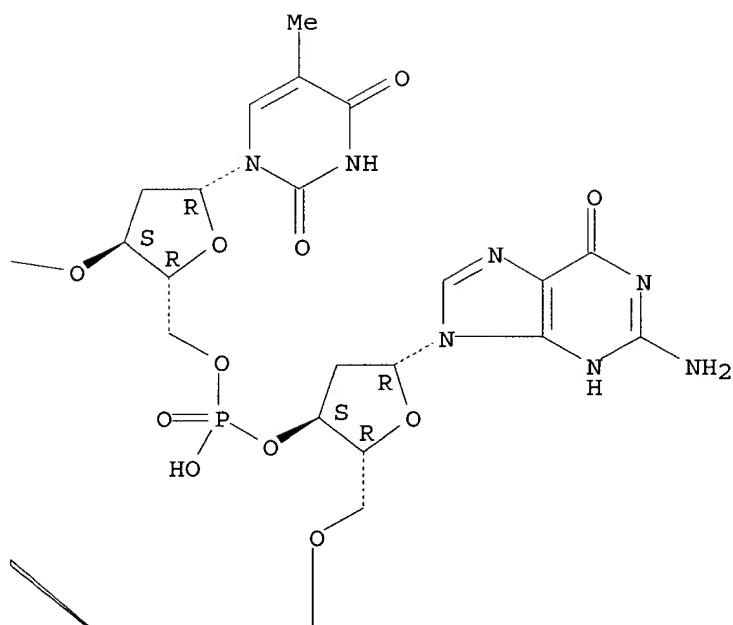
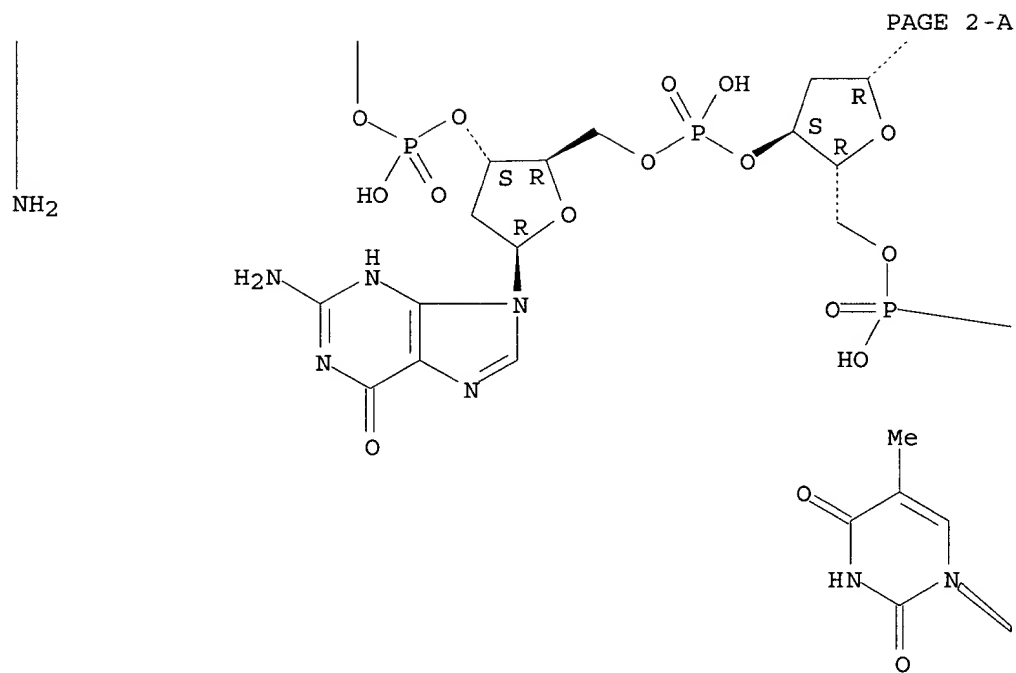
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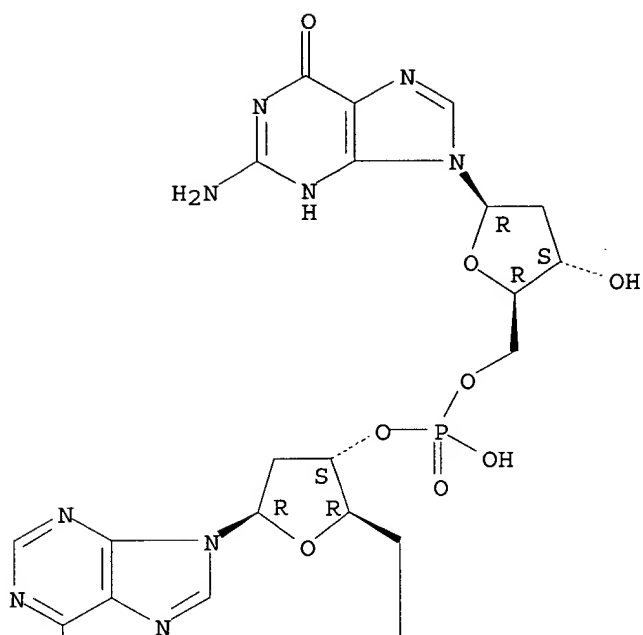
RN 173264-31-8 CAPLUS

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

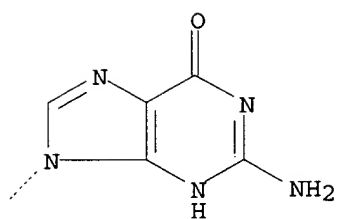
Absolute stereochemistry.



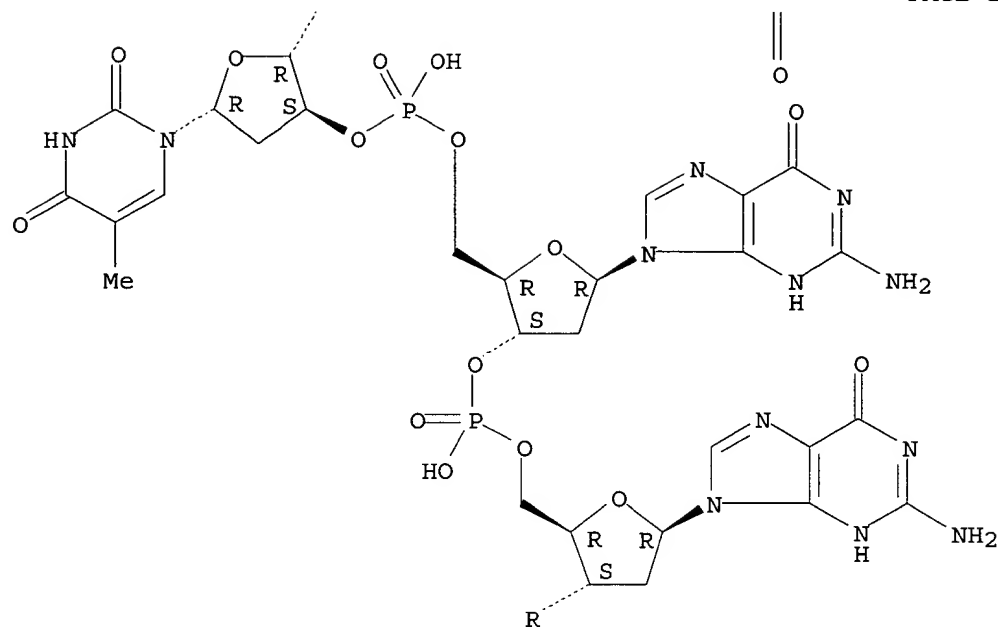
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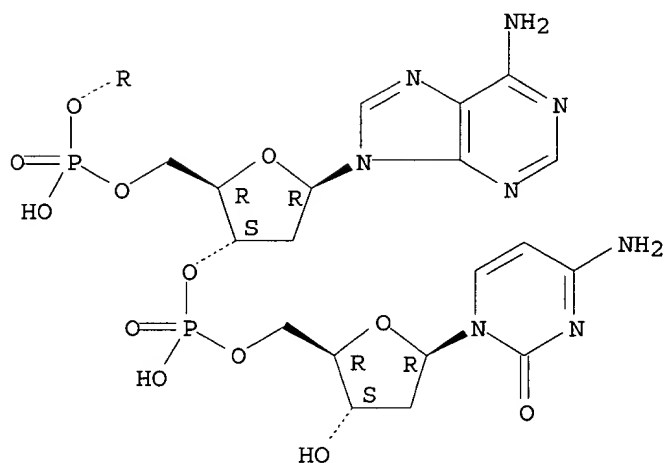
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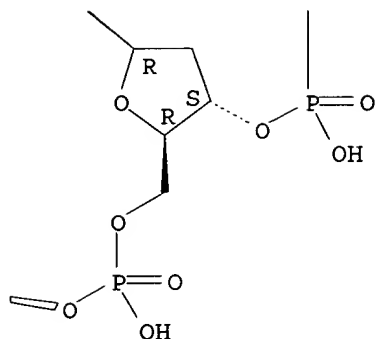


RN 173264-23-8 CAPLUS

CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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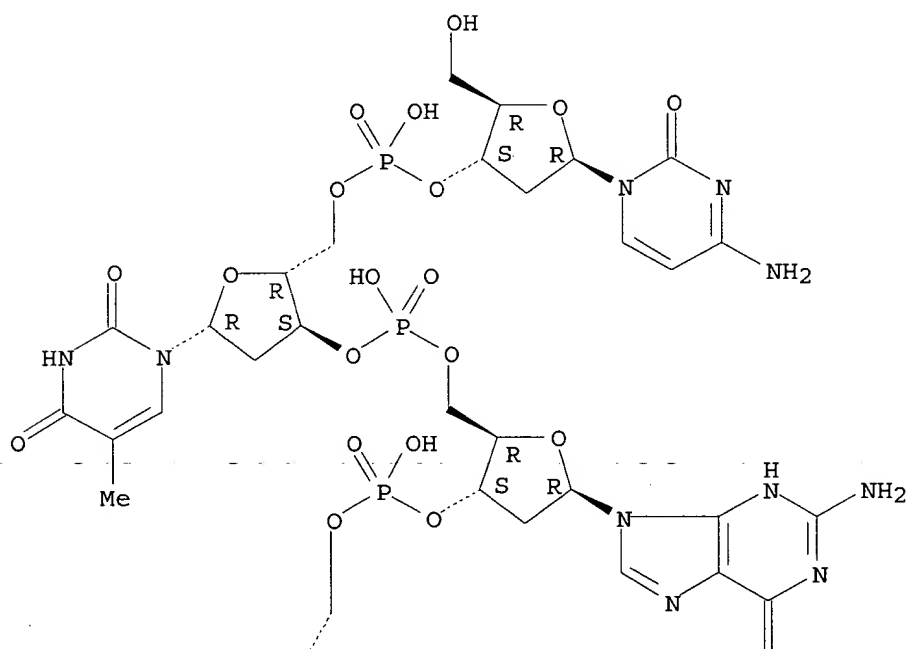


RN 173264-22-7 CAPLUS

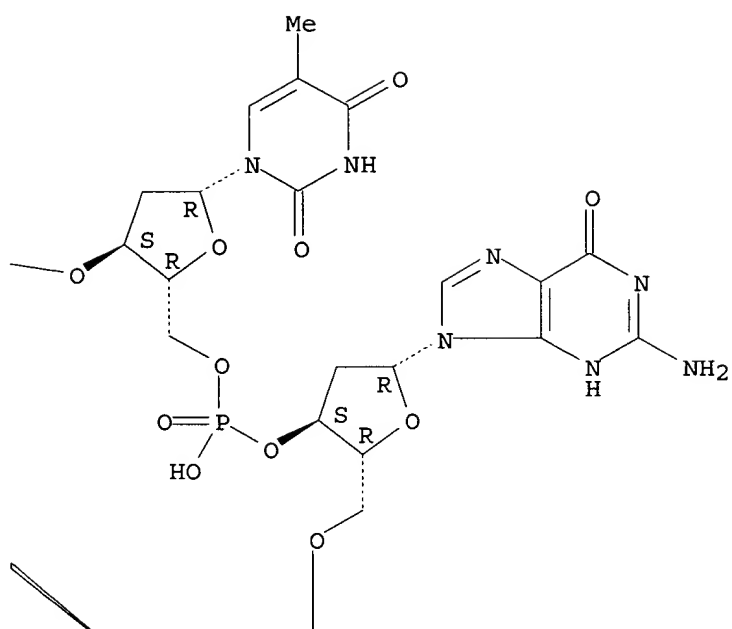
CN Cytidine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

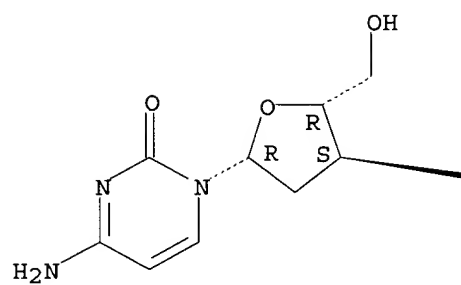
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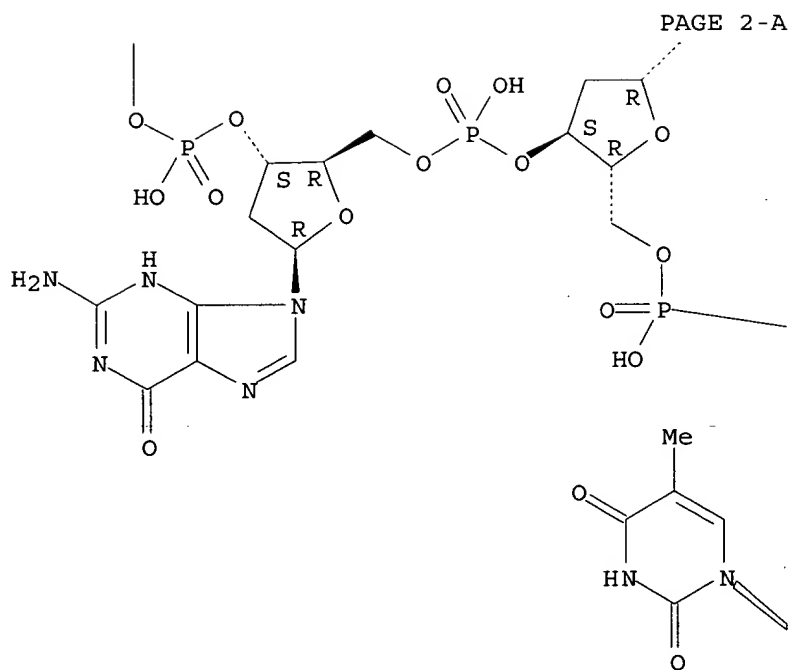
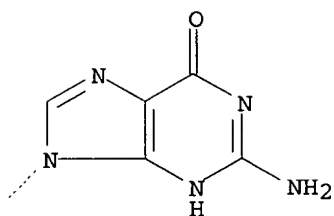
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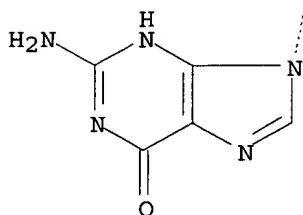
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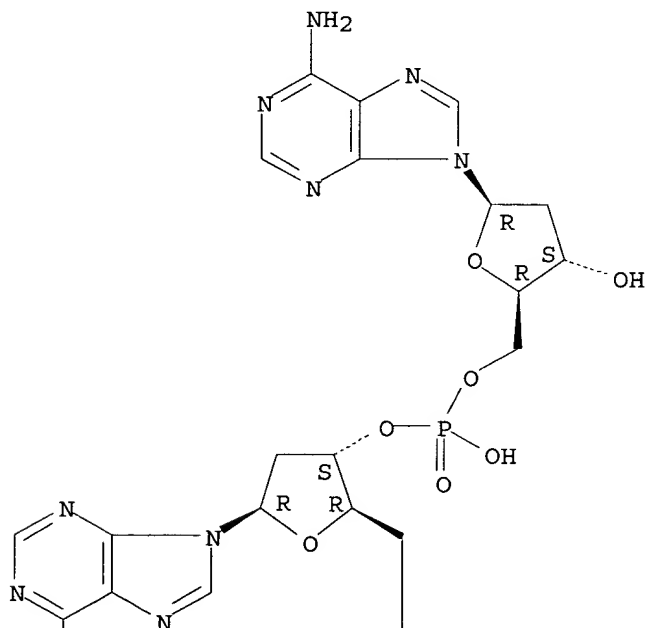


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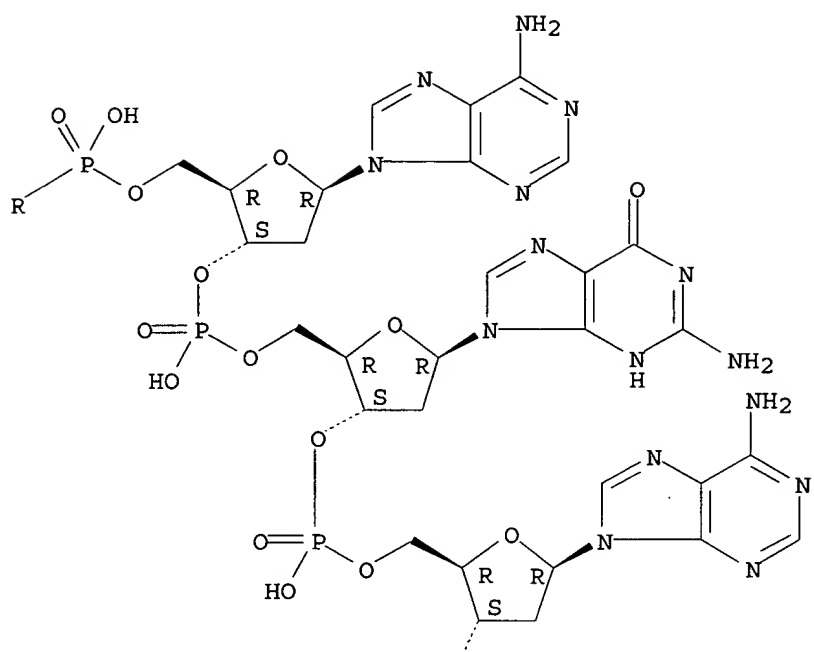


CN Adenosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

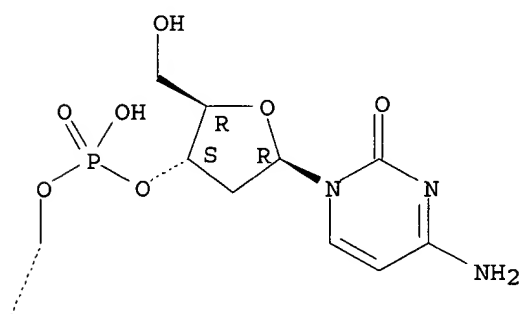
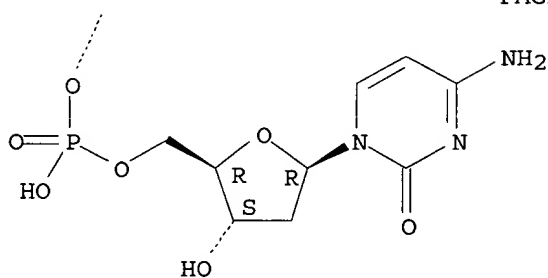
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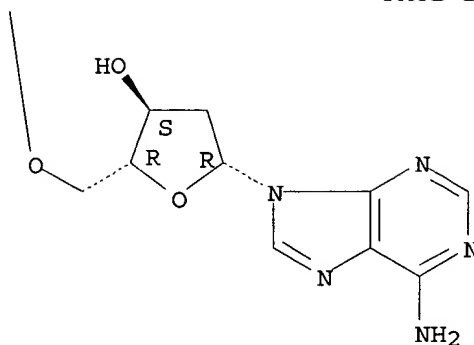
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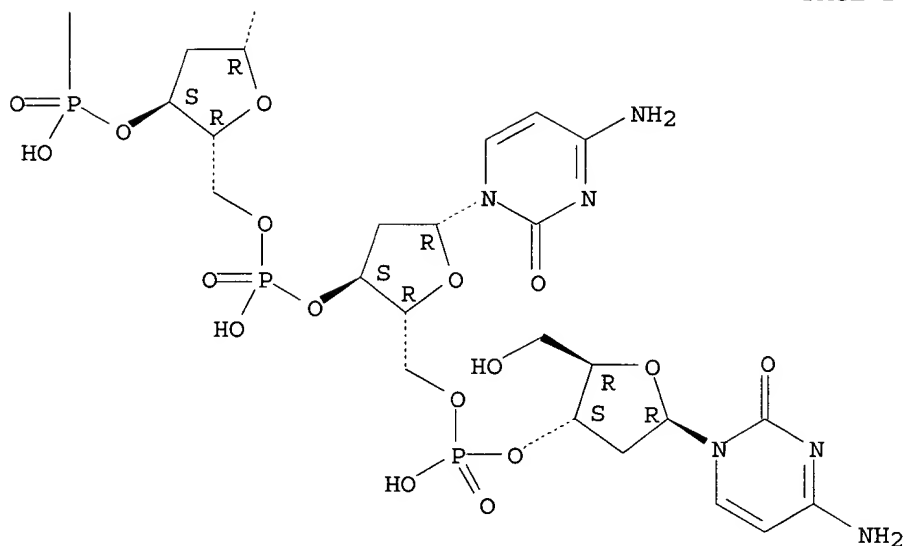
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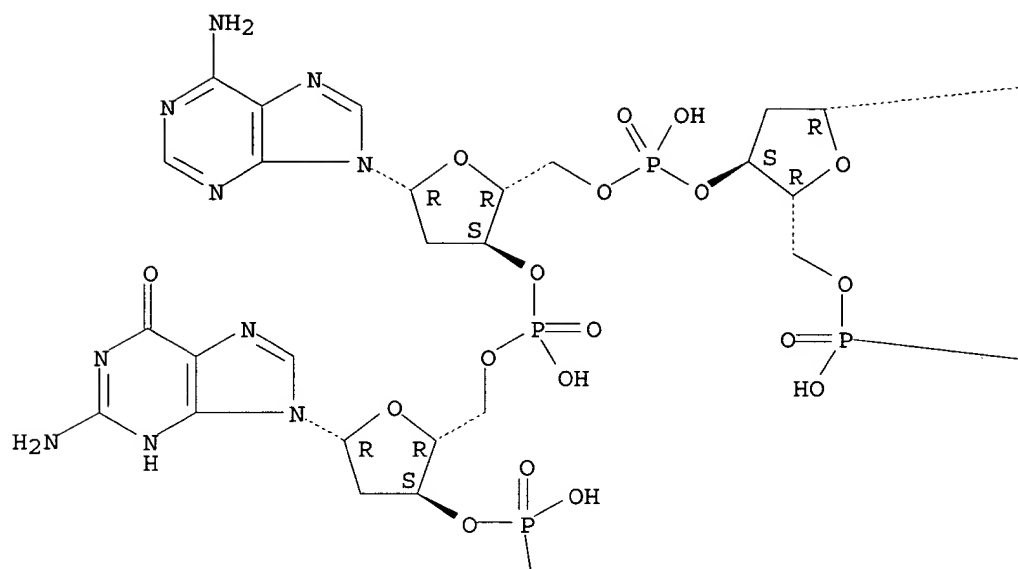


RN 173264-18-1 CAPLUS

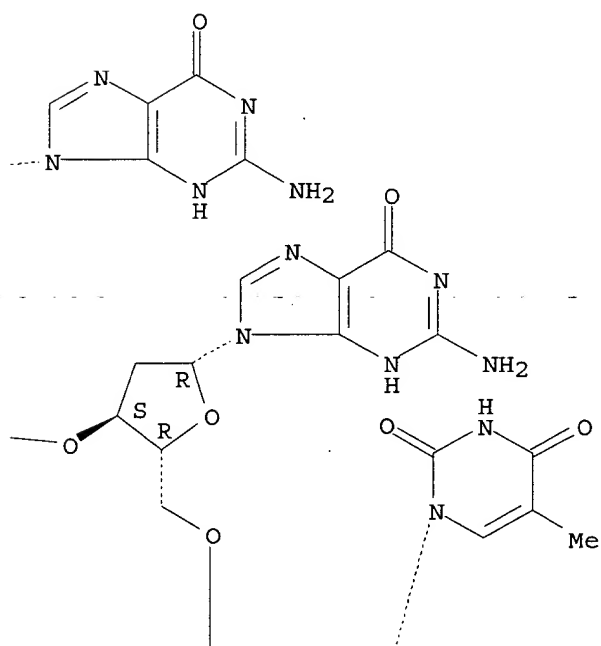
CN Cytidine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

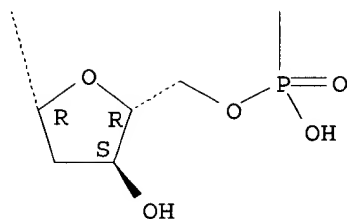
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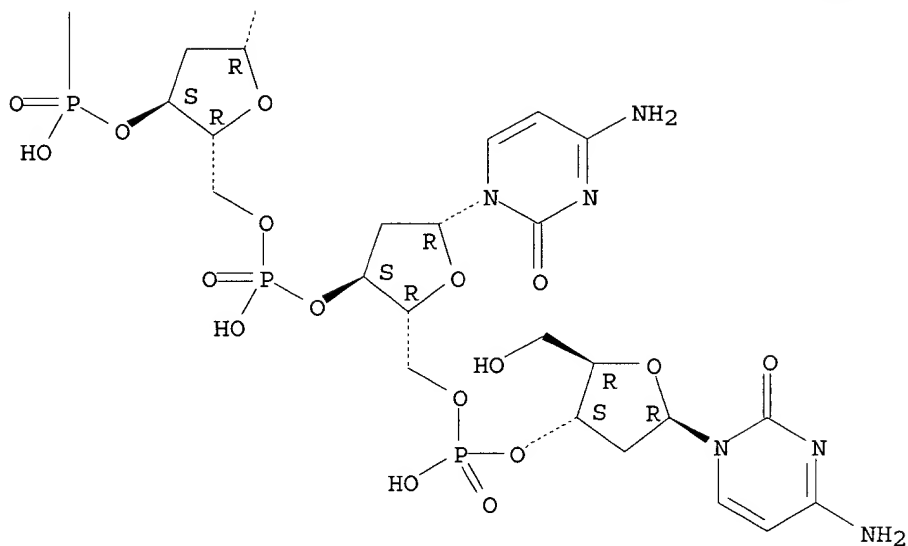
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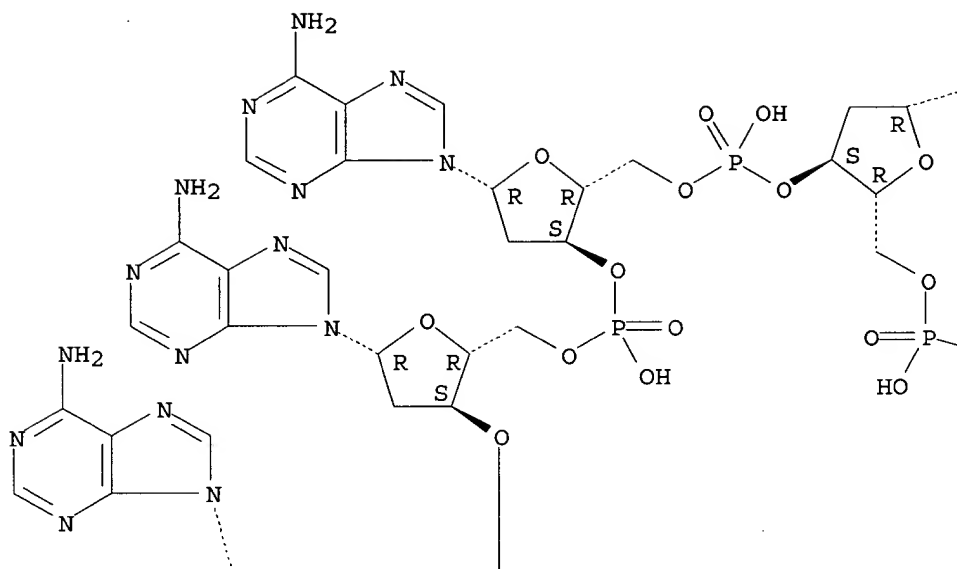


RN 173264-10-3 CAPLUS

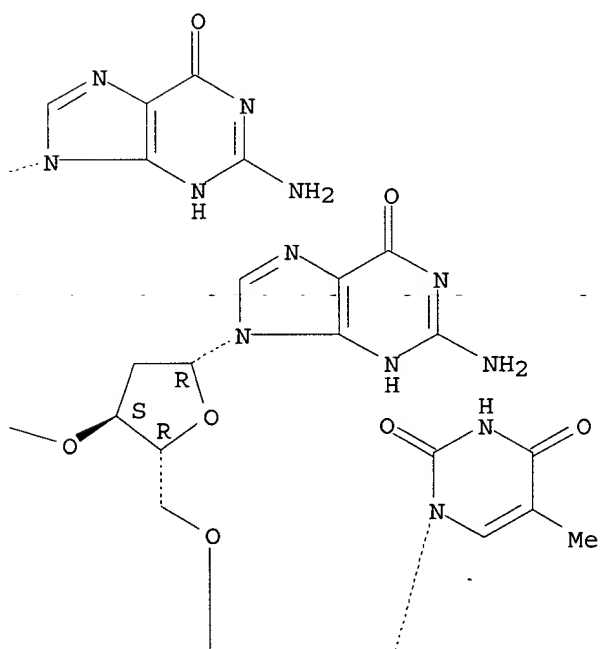
CN Adenosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

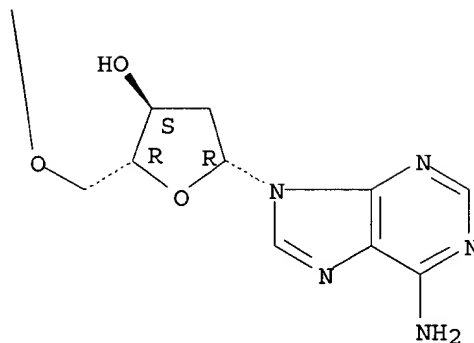
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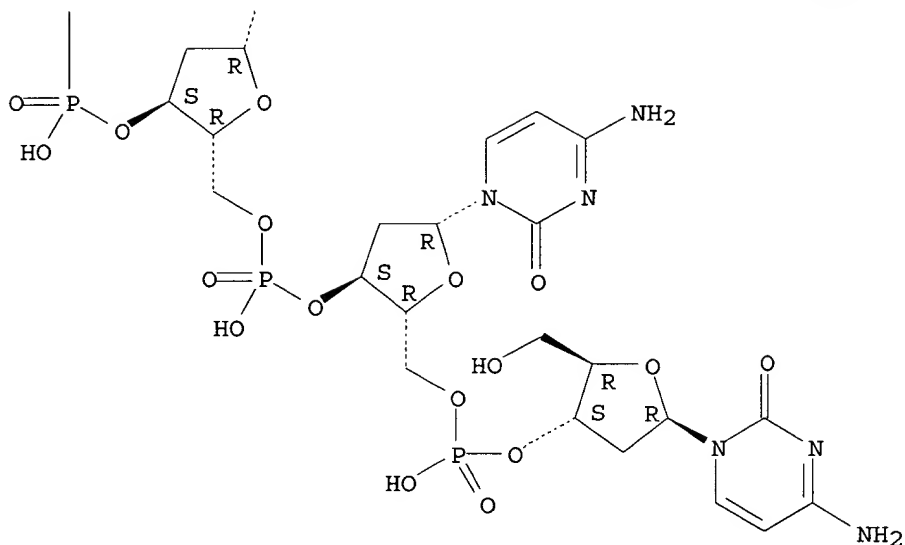
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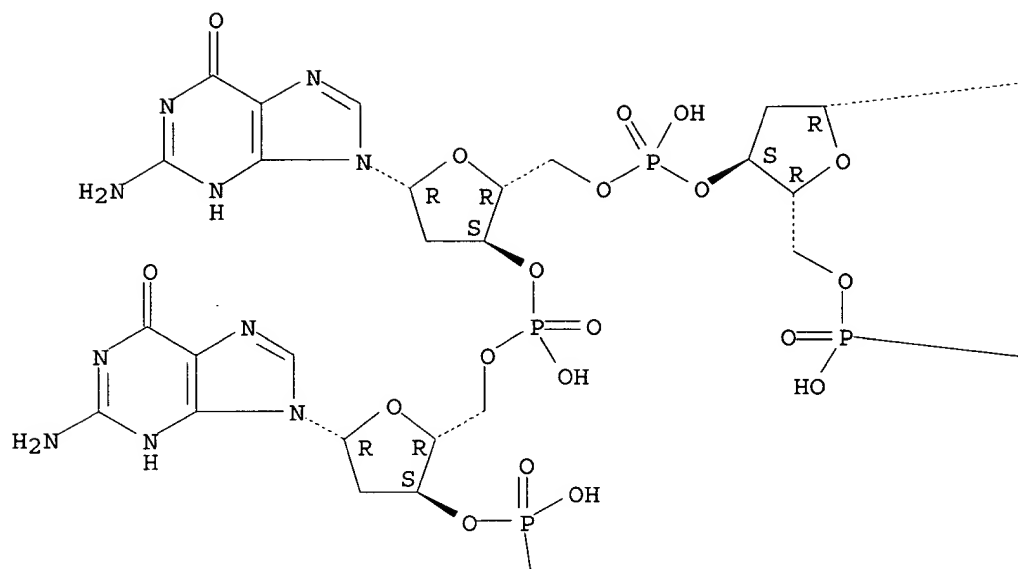


RN 173264-09-0 CAPLUS

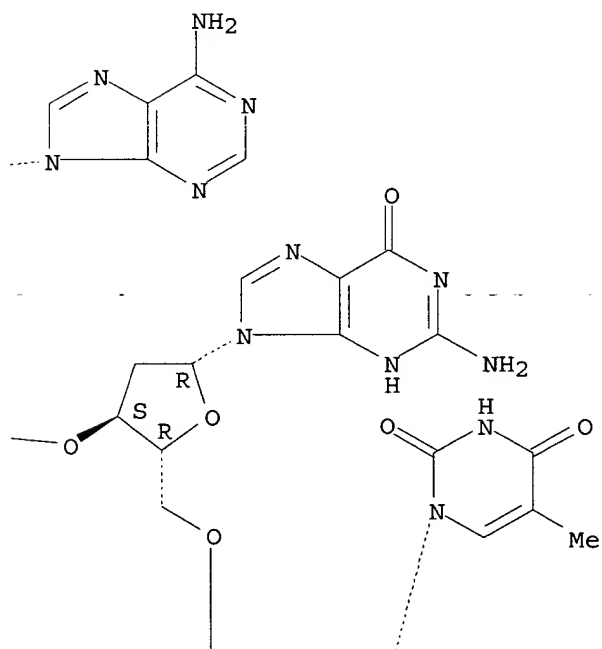
CN Adenosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

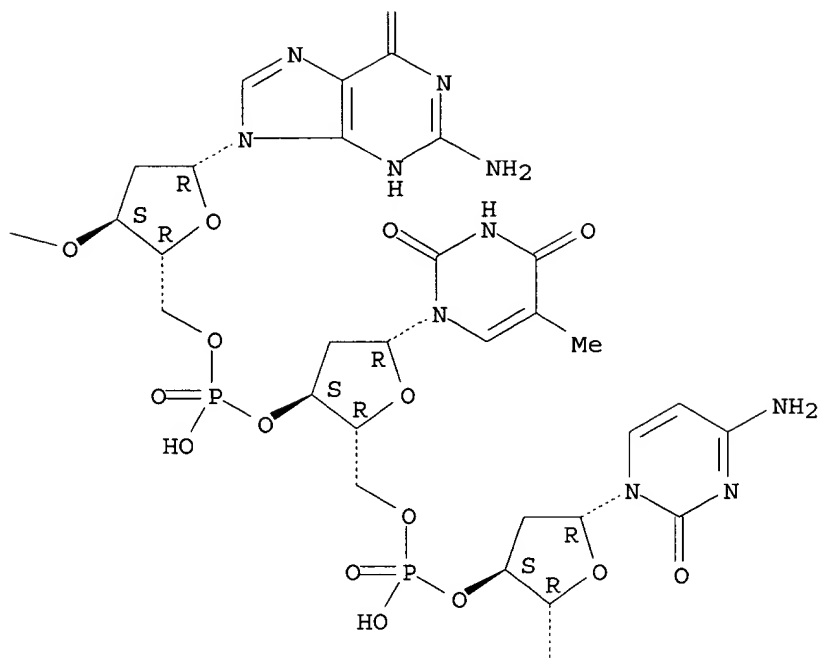
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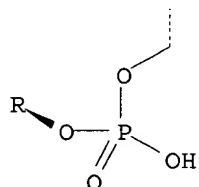
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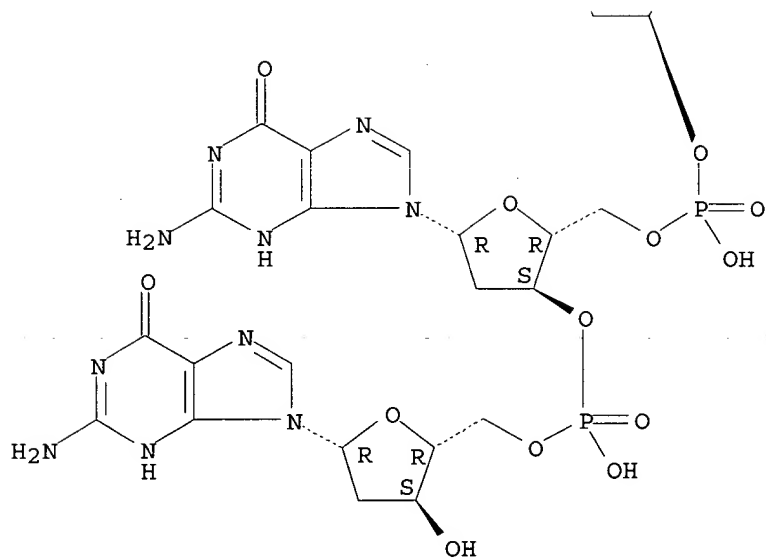
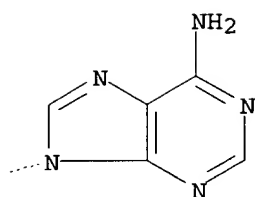


RN 173264-08-9 CAPLUS

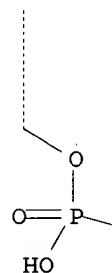
CN Adenosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

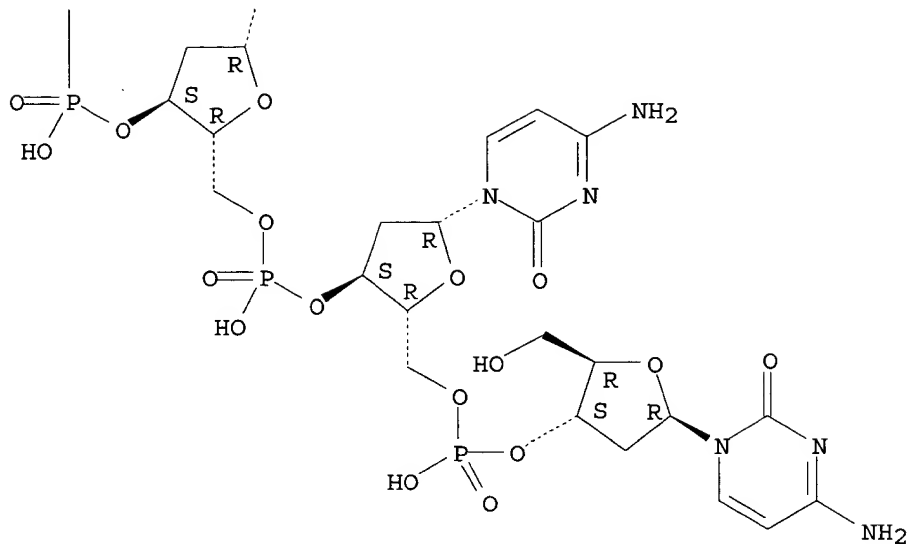
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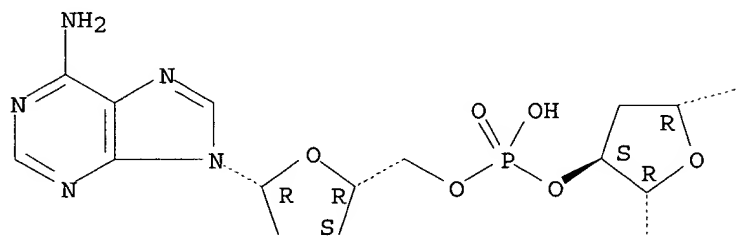
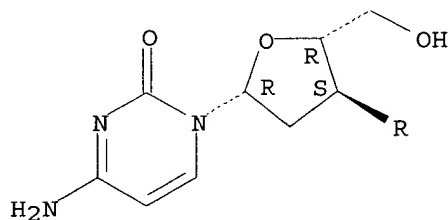


RN 173264-07-8 CAPLUS

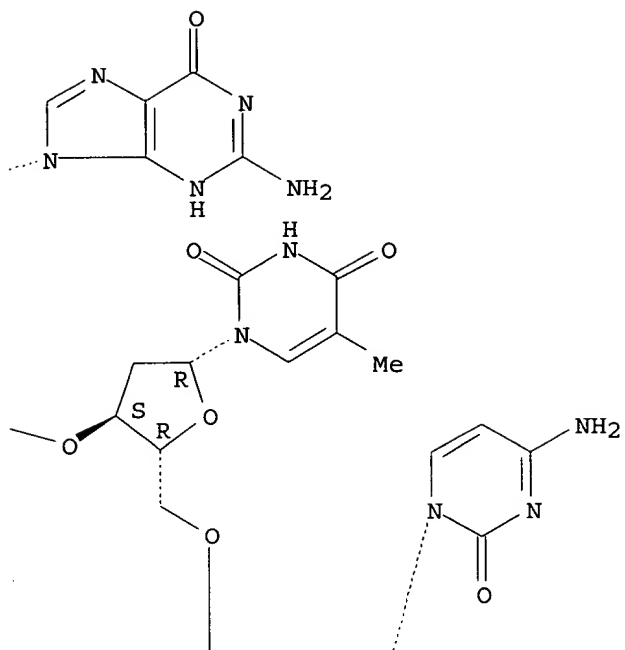
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

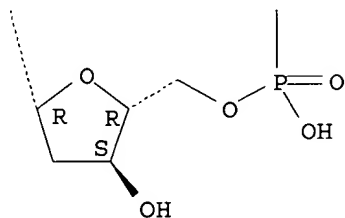
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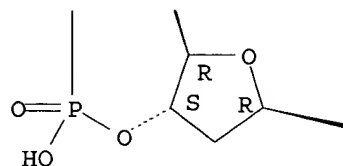
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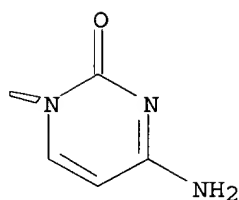
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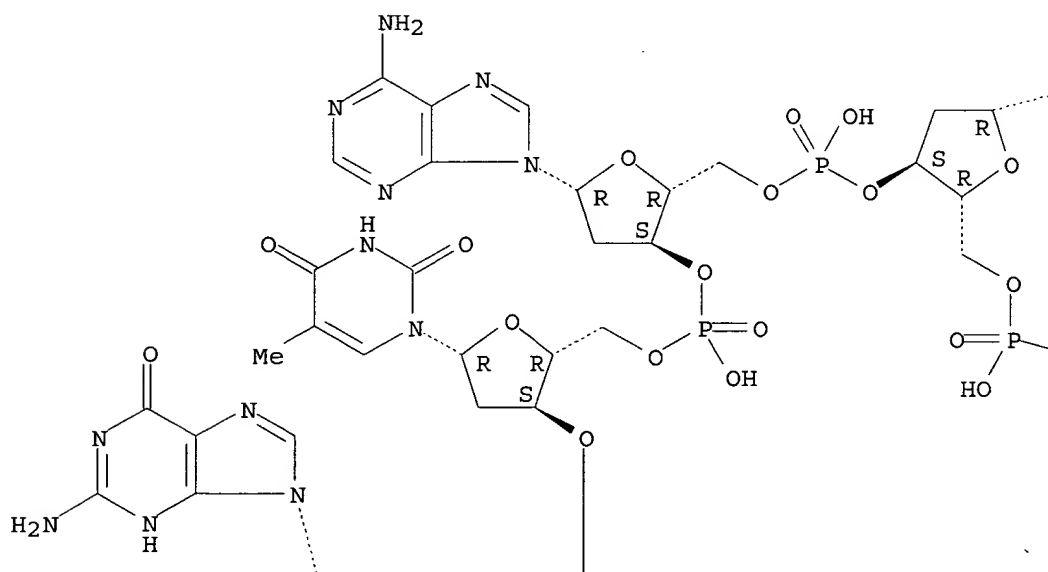


RN 173264-05-6 CAPLUS

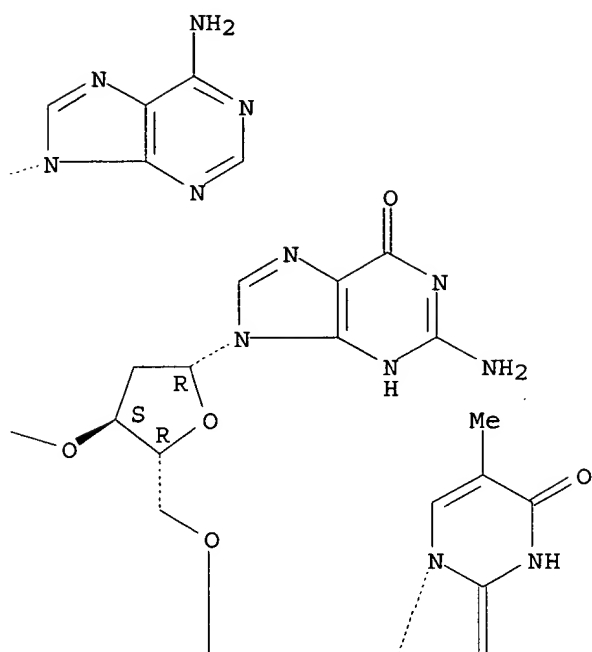
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

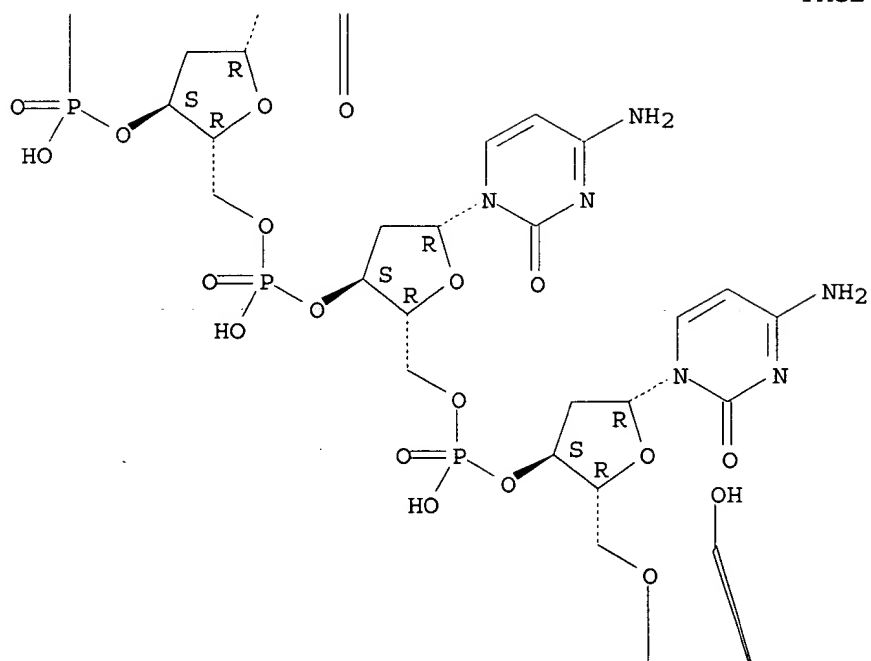
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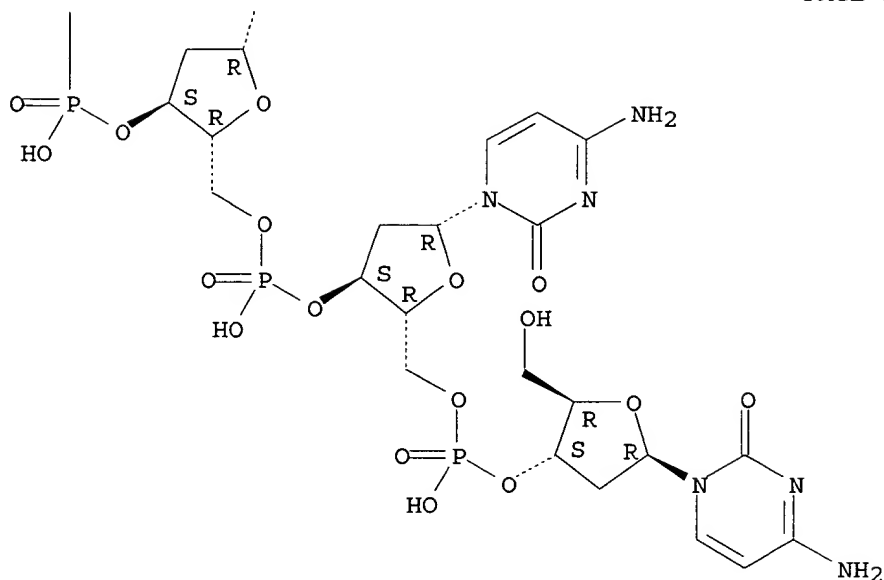
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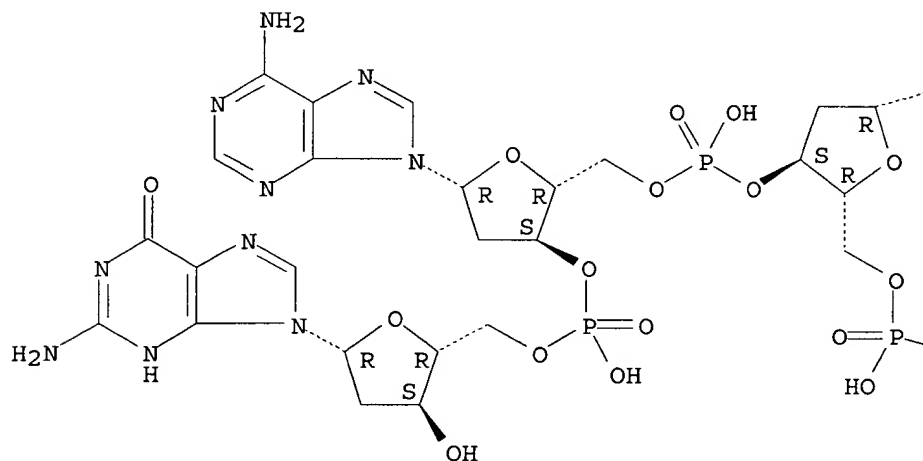


RN 173264-04-5 CAPLUS

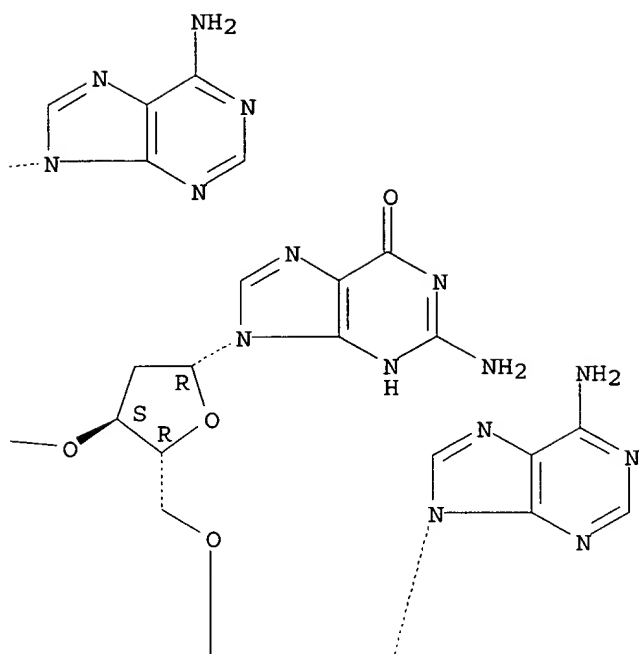
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

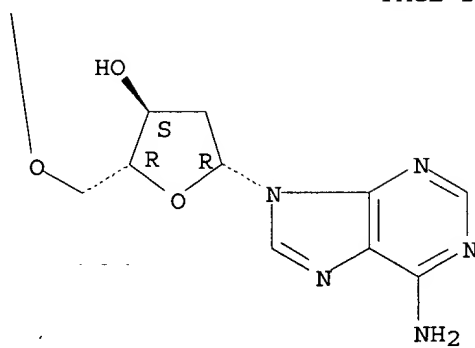
PAGE 1-A



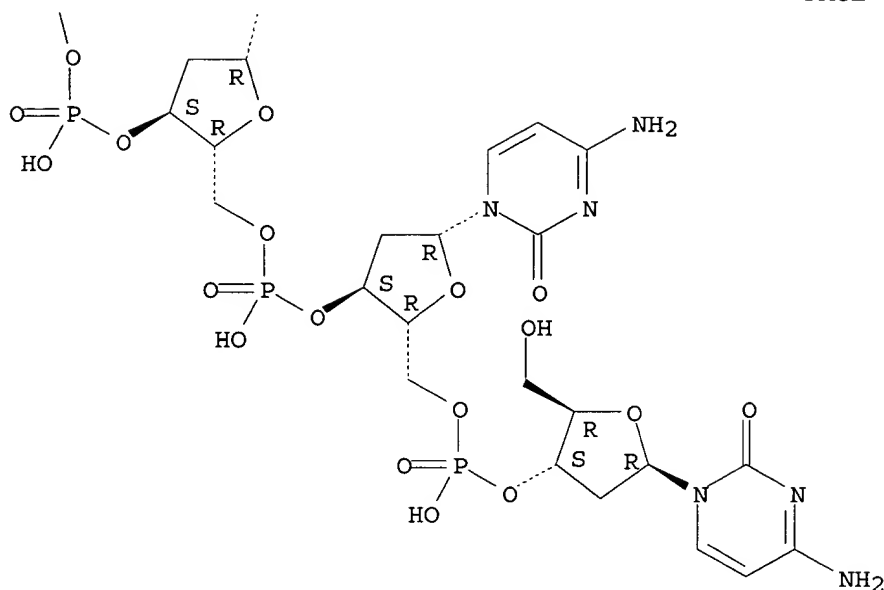
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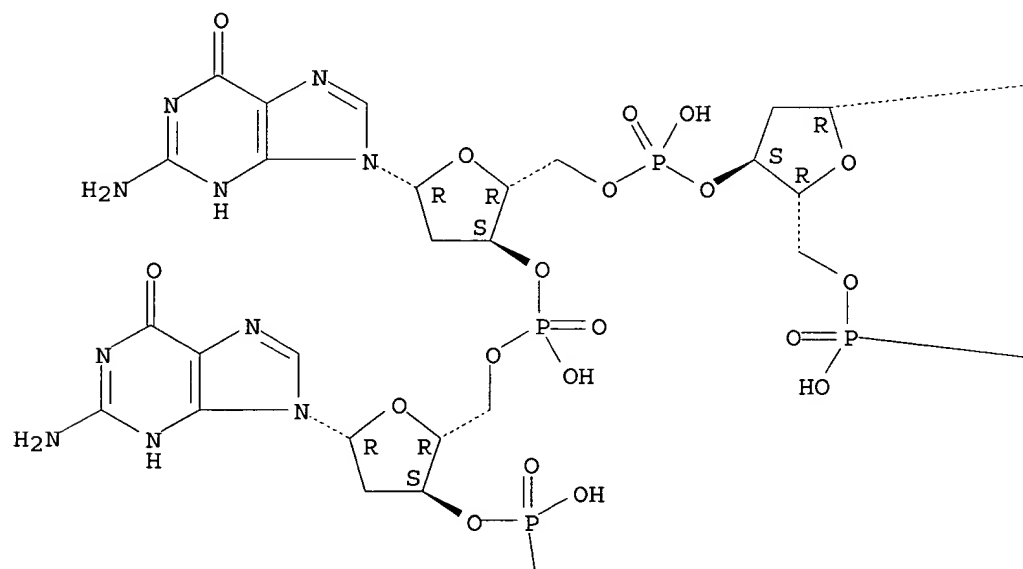


RN 173264-01-2 CAPLUS

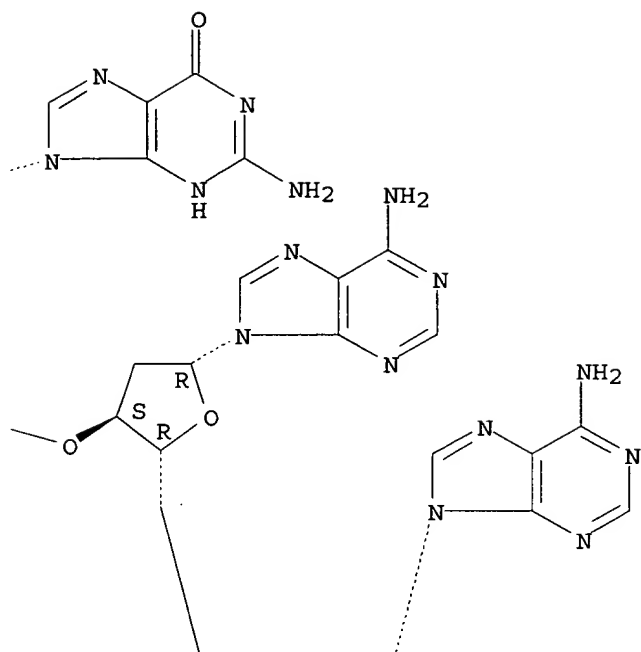
CN Adenosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

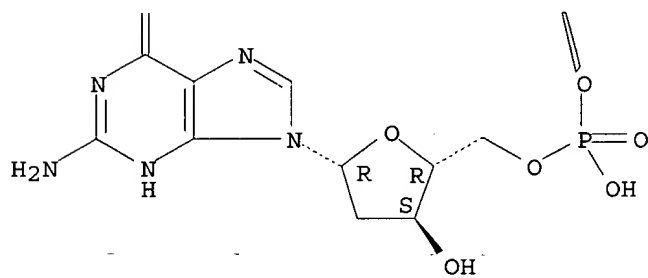
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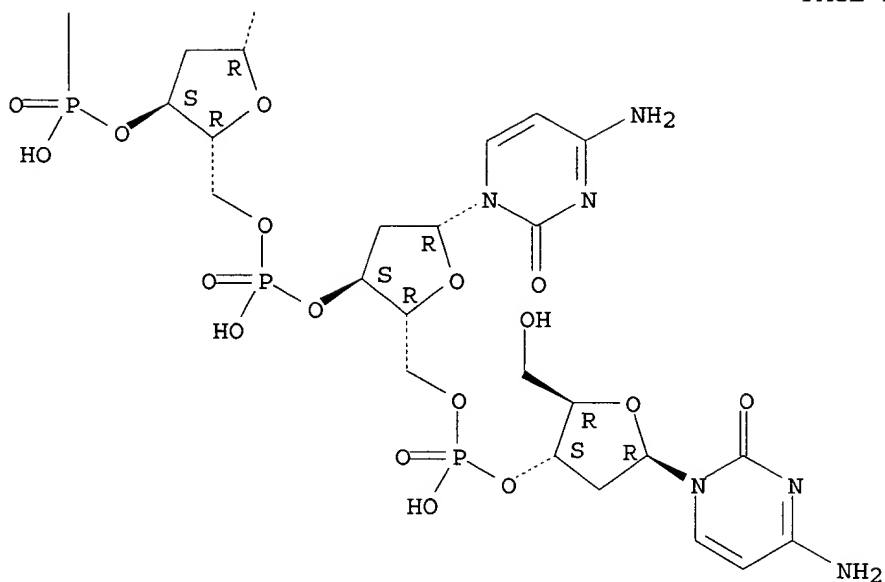
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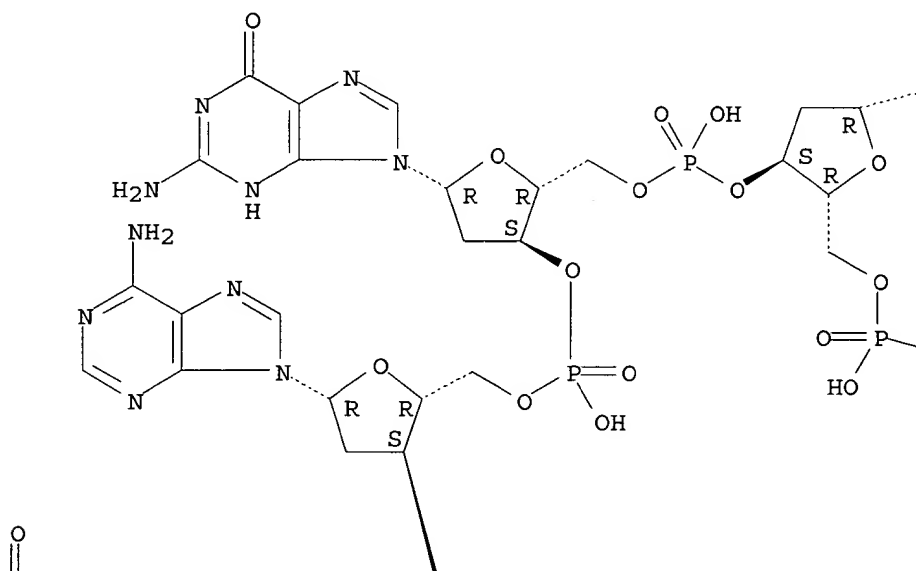


RN 173264-00-1 CAPLUS

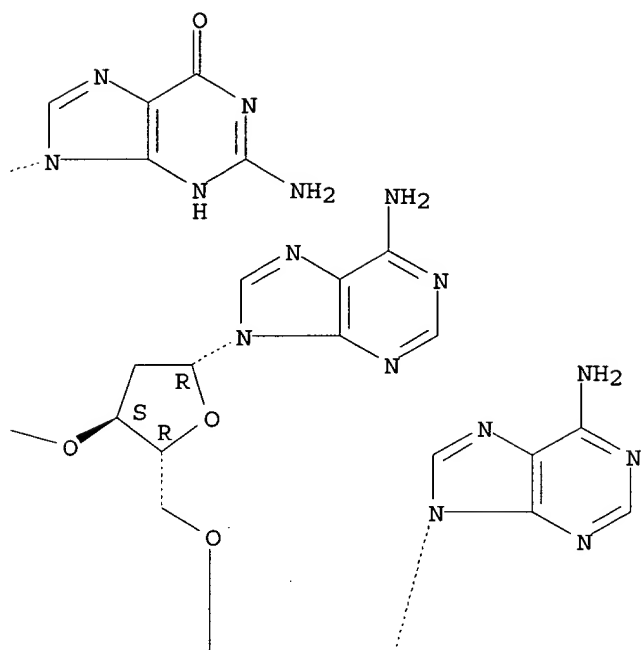
| CA INDEX | NAME |
|-----------|---|
| 21201-001 | Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- |

Absolute stereochemistry.

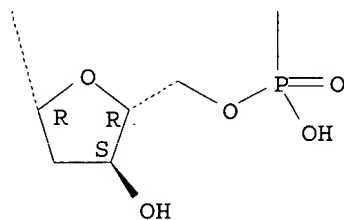
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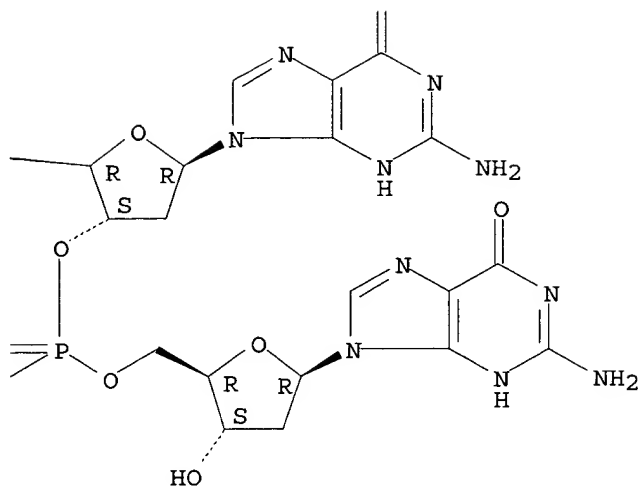
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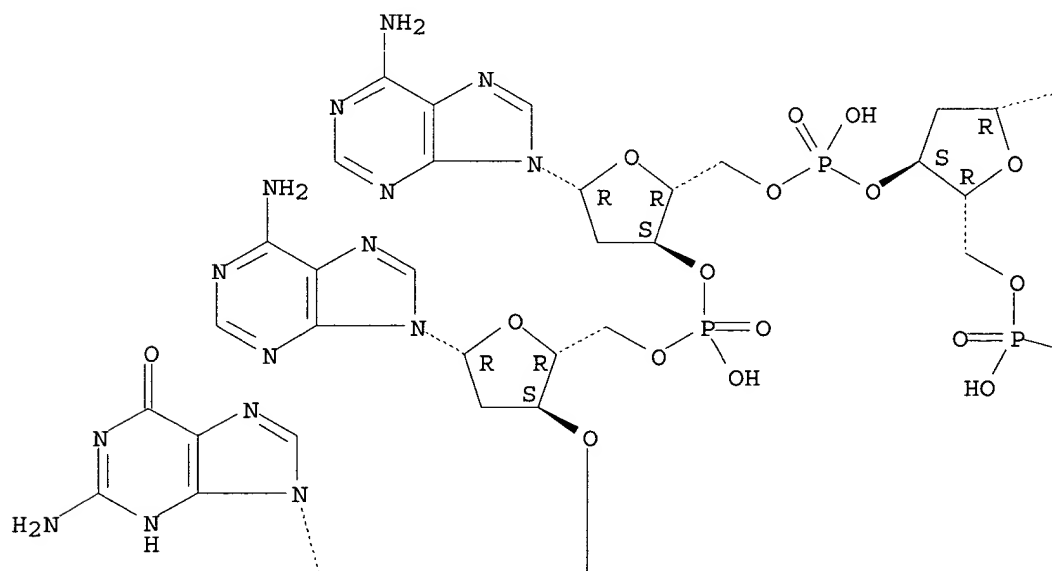


RN 173263-97-3 CAPLUS

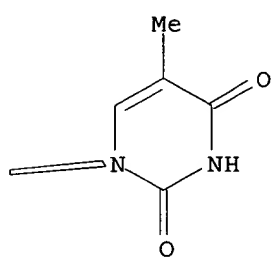
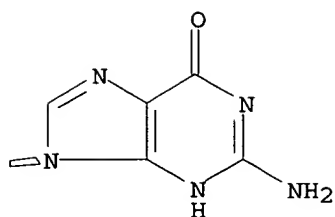
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

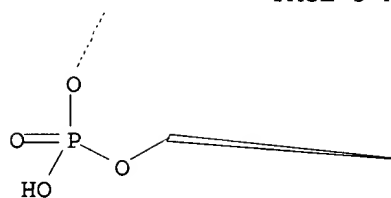
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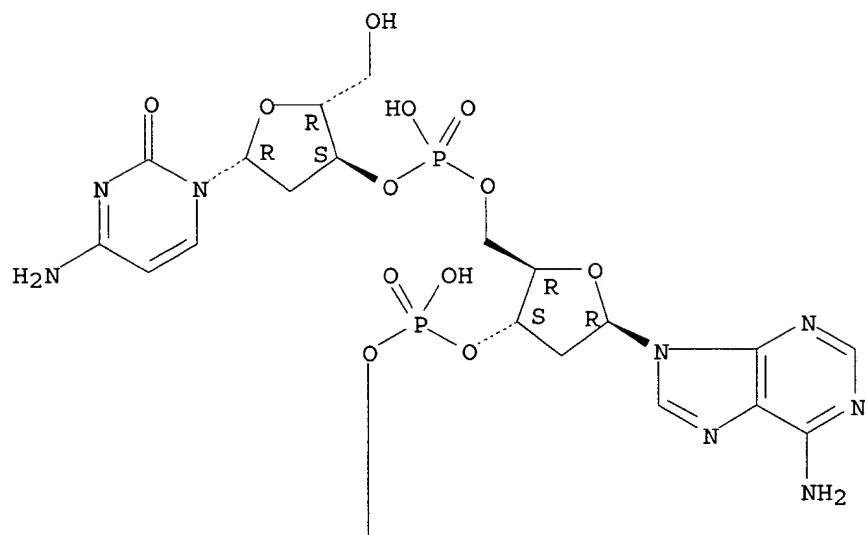
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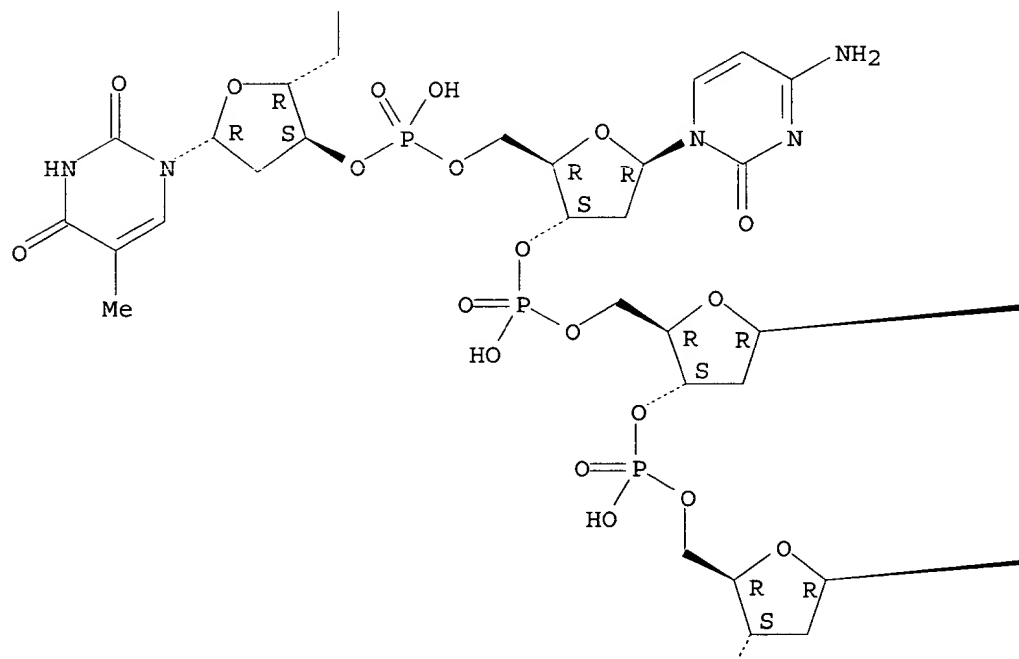
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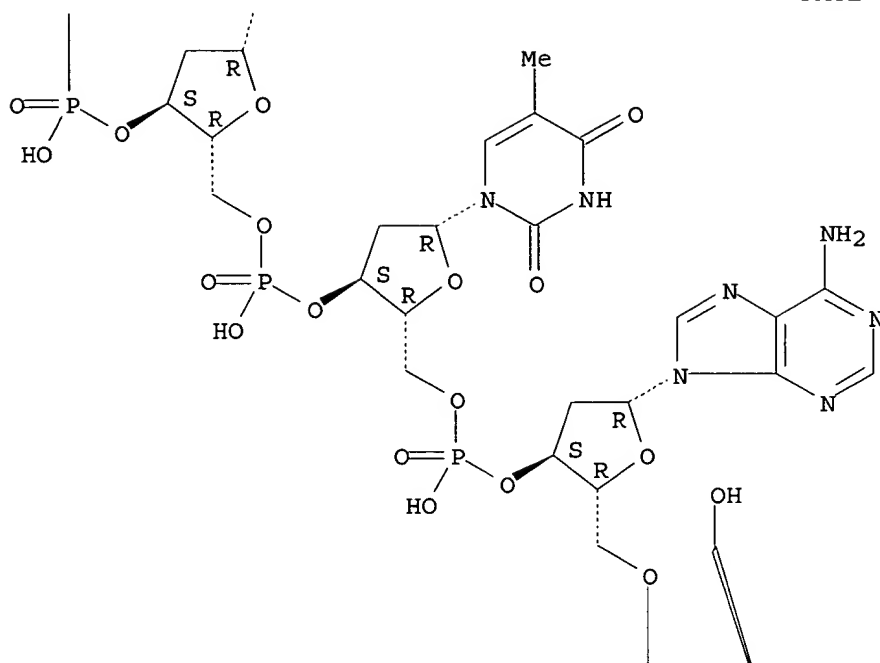
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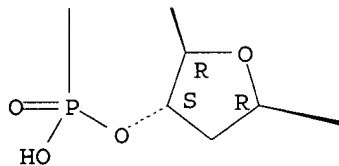
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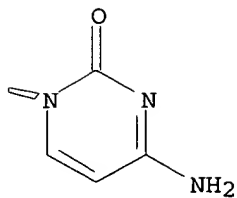
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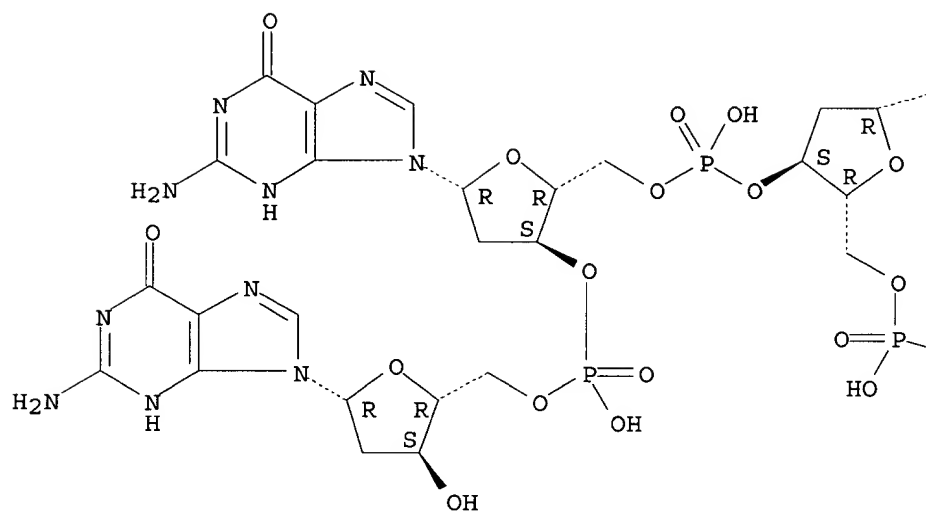
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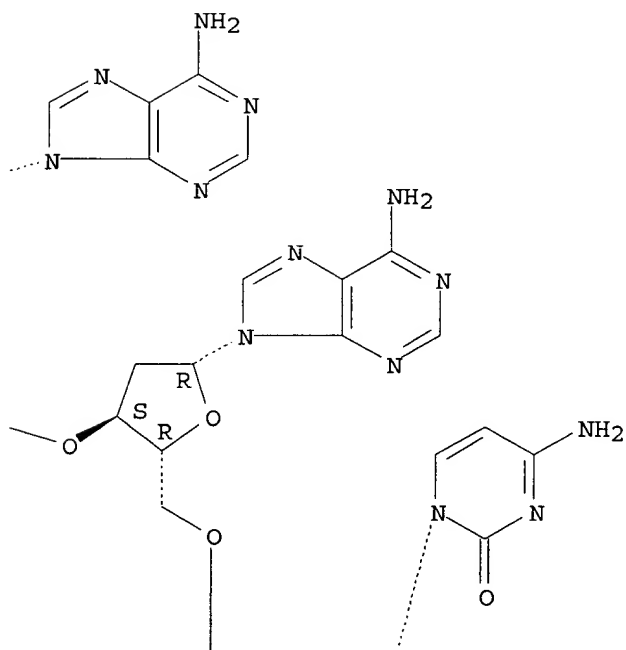
RN 173263-95-1 CAPLUS
 CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

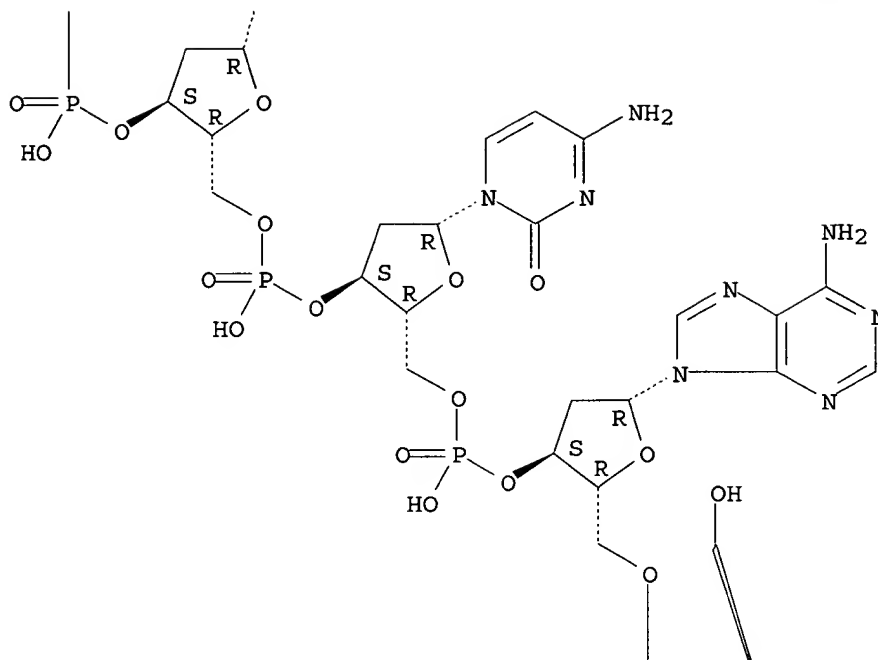
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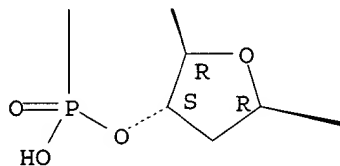
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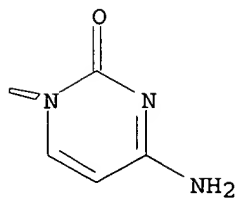
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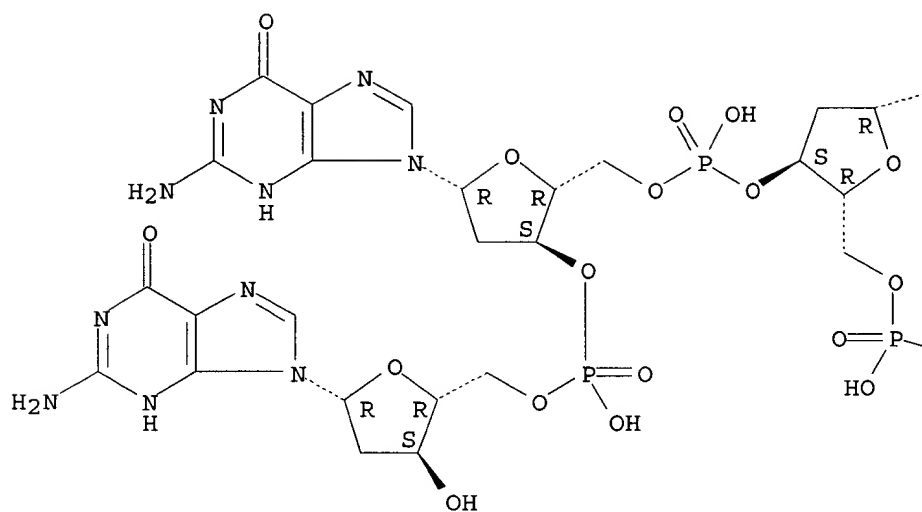


RN 173263-94-0 CAPLUS
 CN Guanosine, 2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

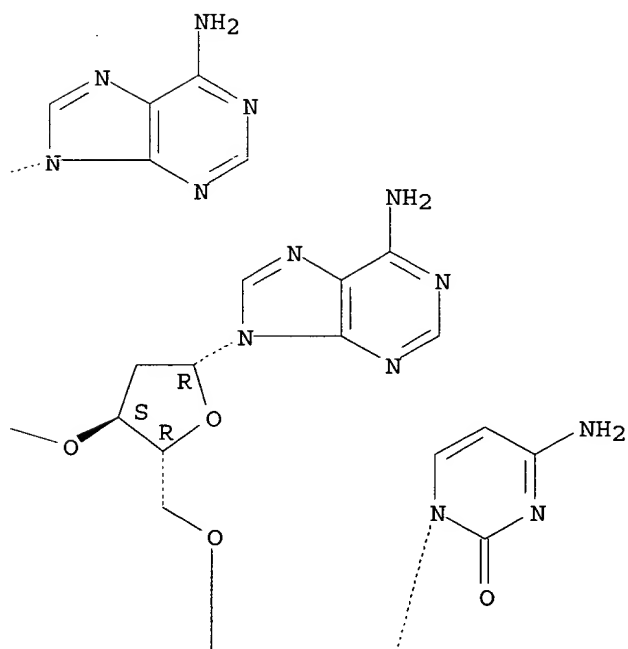
Absolute stereochemistry.

Absolute stereochemistry.

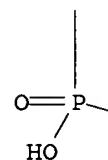
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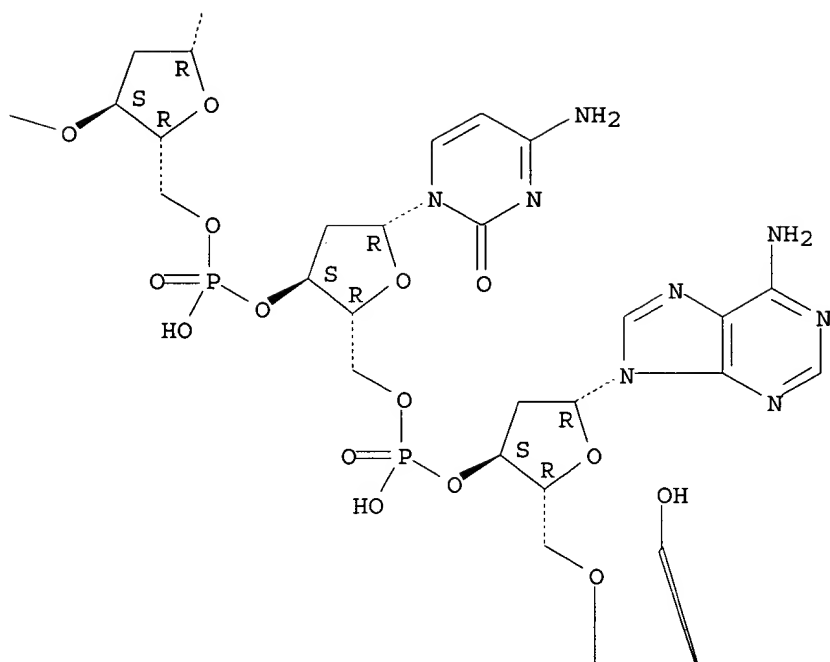
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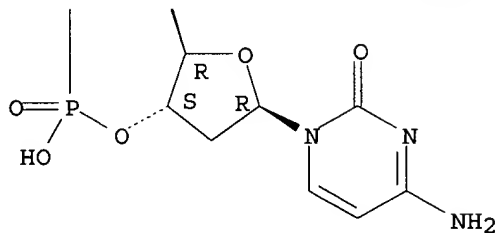
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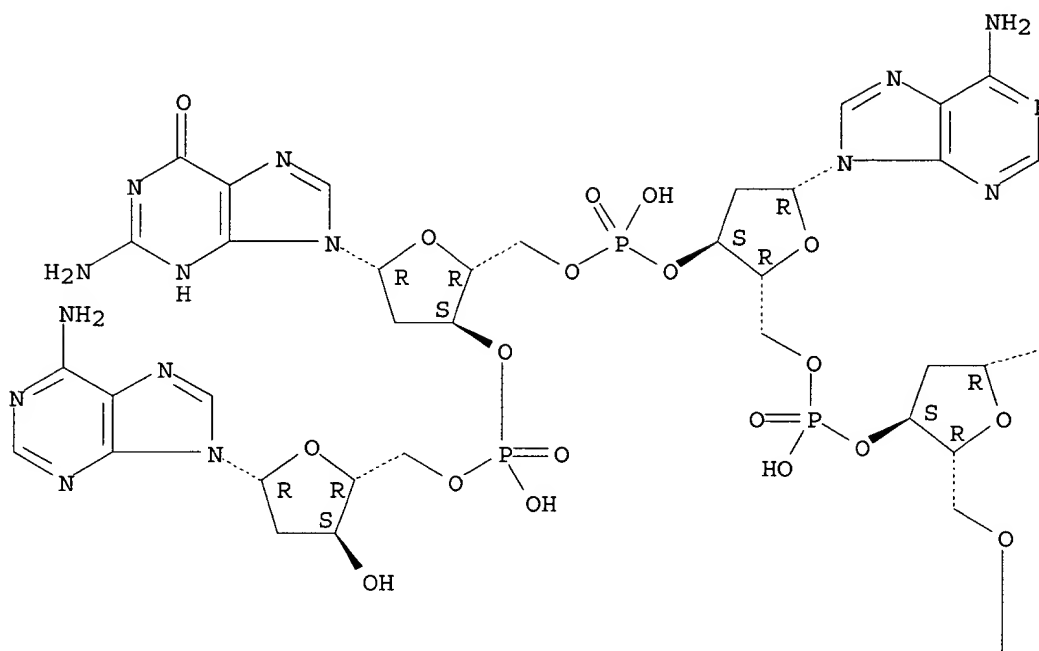


RN 173263-91-7 CAPLUS
 CN Guanosine, 2'-deoxycytidyl-(3'→5')-2'-deoxyadenyl-
 (3'→5')-2'-deoxycytidyl-(3'→5')-2'-deoxycytidyl-
 (3'→5')-2'-deoxyadenyl-(3'→5')-2'-deoxyadenyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

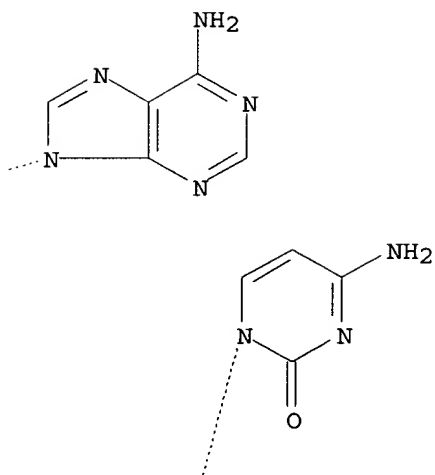
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

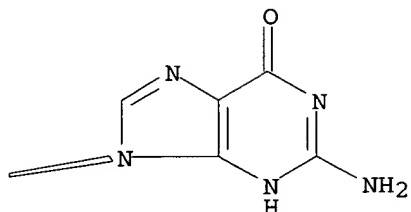
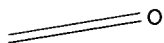
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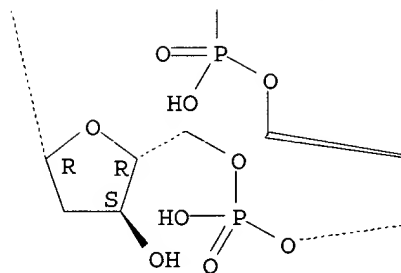
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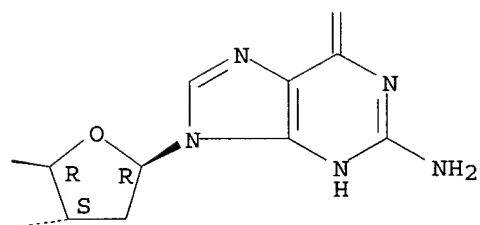
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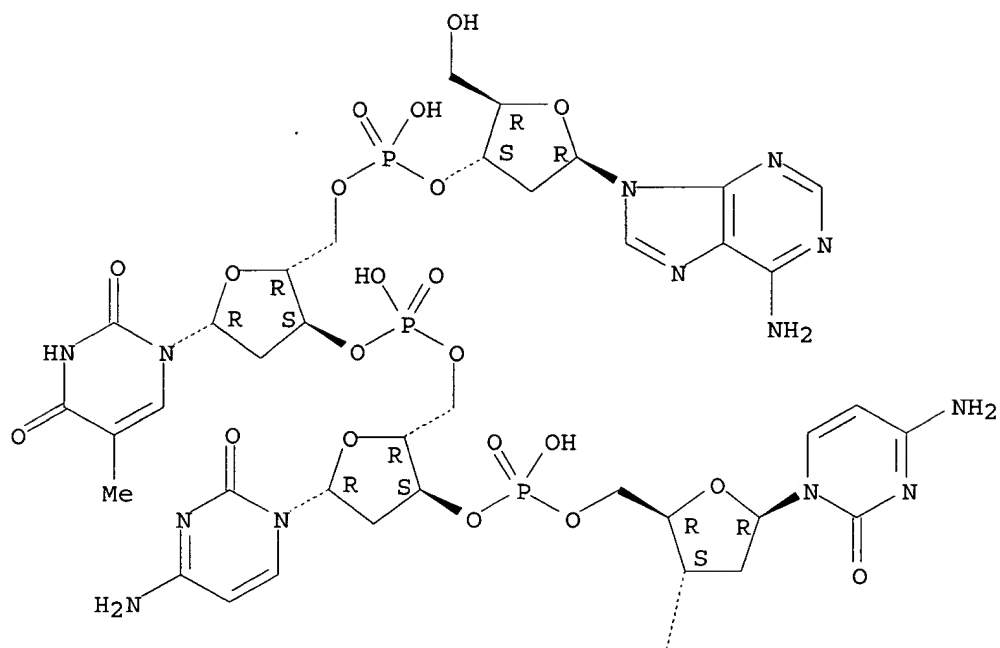


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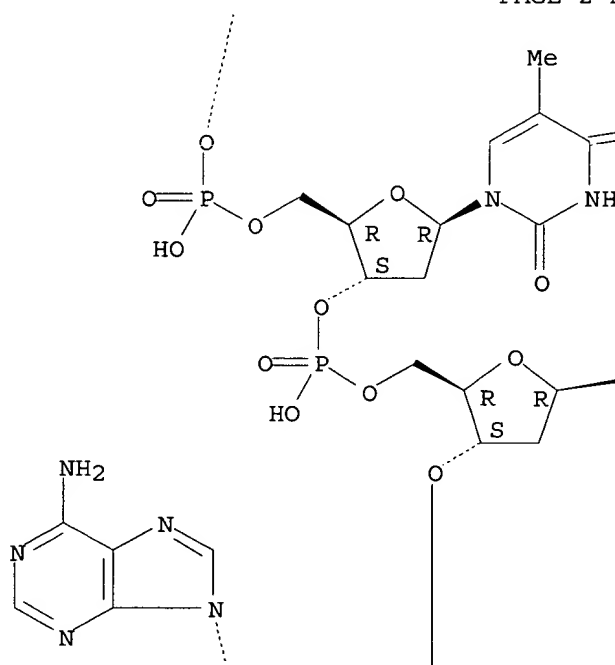


RN 173263-90-6 CAPLUS
 CN Adenosine, 2'-deoxycytidyl-(3'→5')-2'-deoxyadenyl-
 (3'→5')-2'-deoxycytidyl-(3'→5')-2'-deoxycytidyl-
 (3'→5')-2'-deoxyadenyl-(3'→5')-2'-deoxyadenyl-

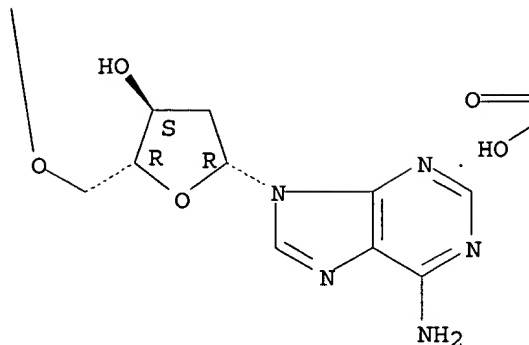
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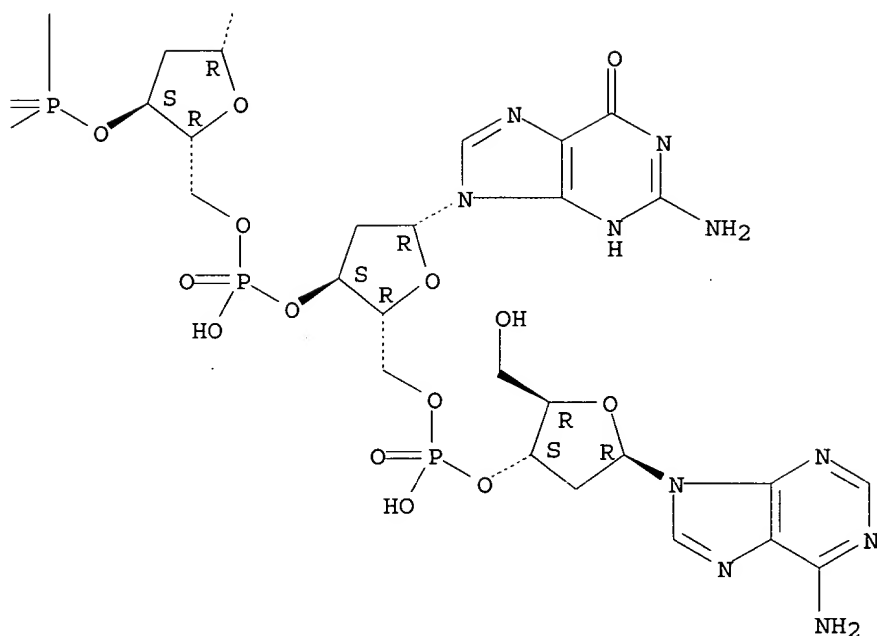
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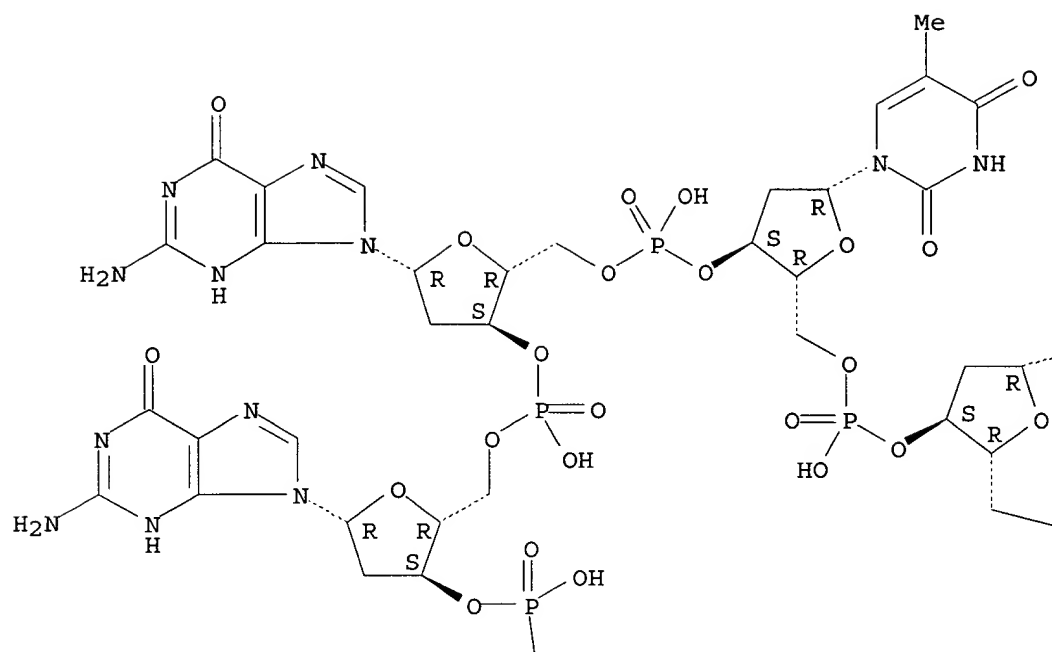


RN 173263-74-6 CAPLUS

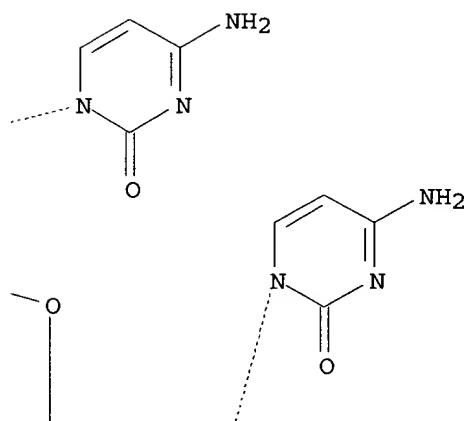
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

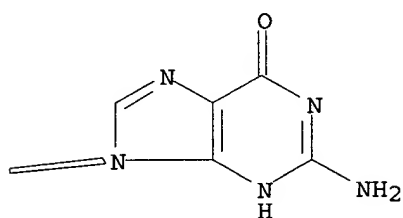
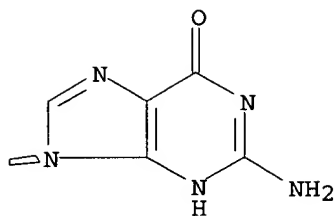
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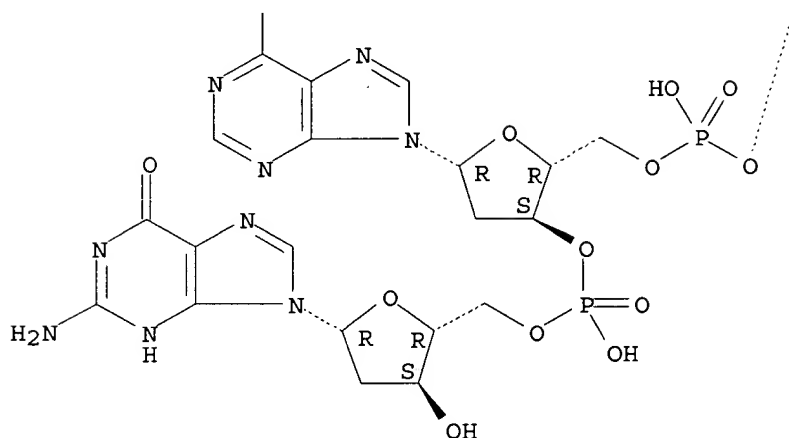
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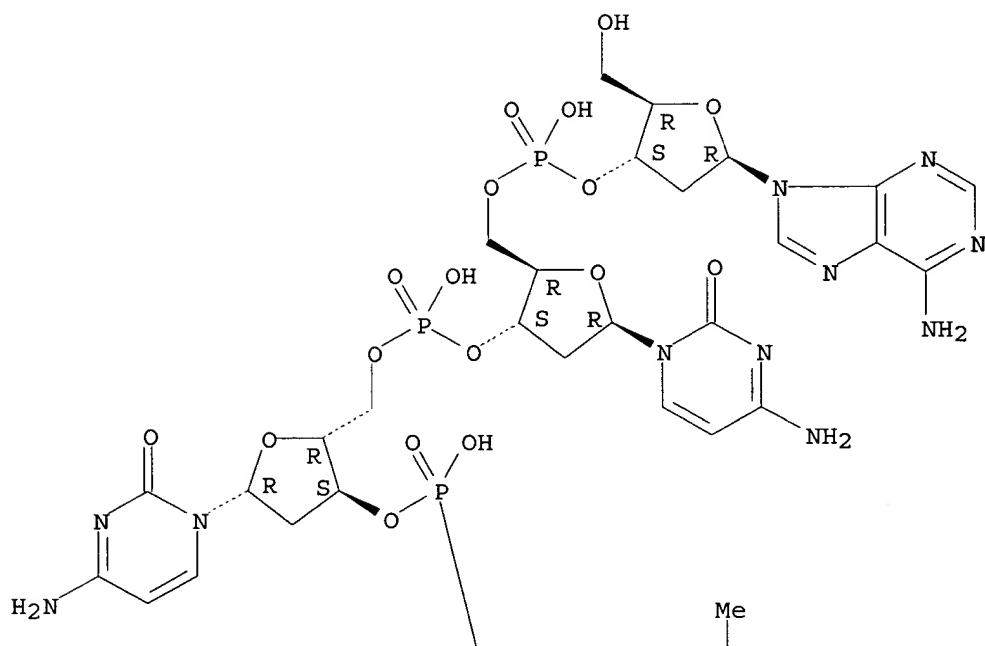


RN 173263-69-9 CAPLUS

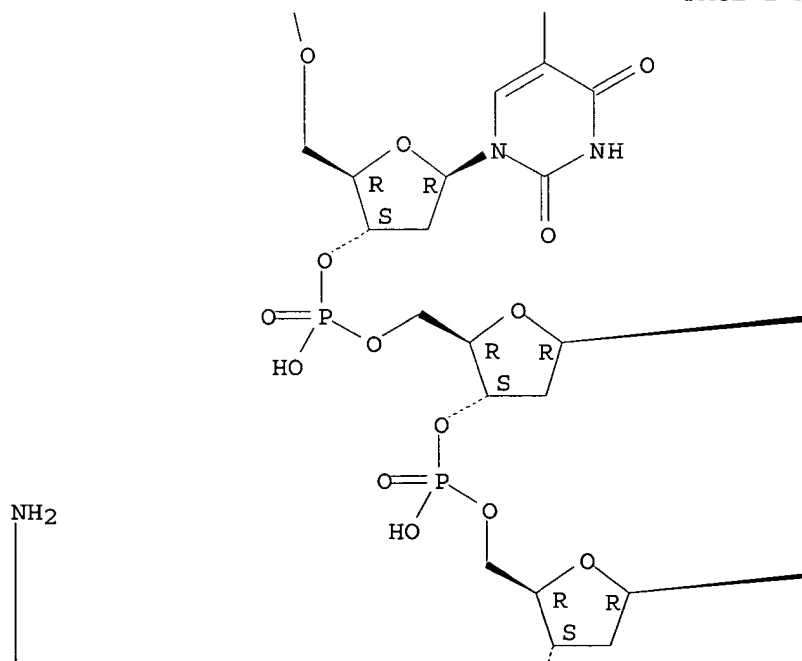
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

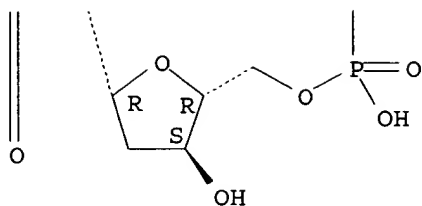
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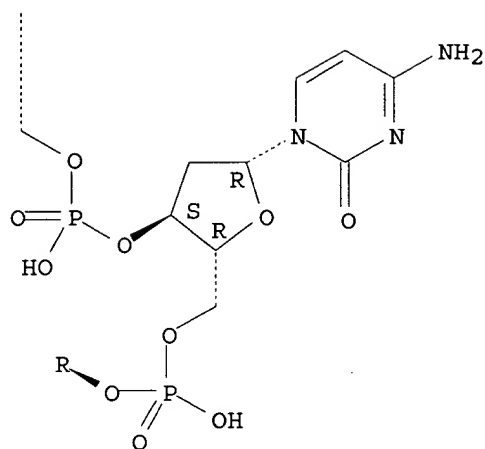
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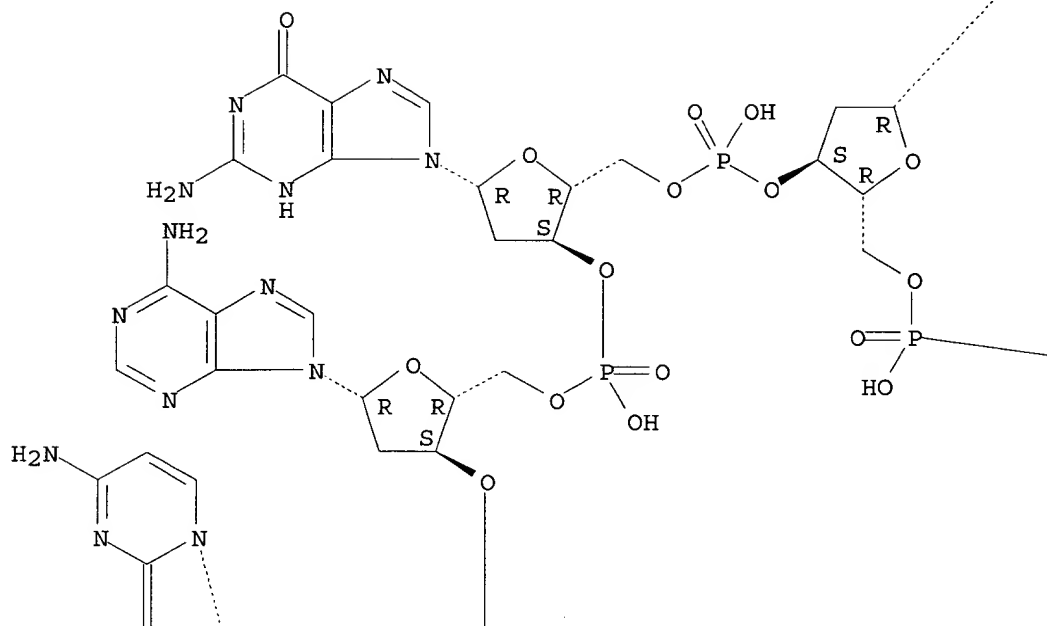


RN 173263-58-6 CAPLUS

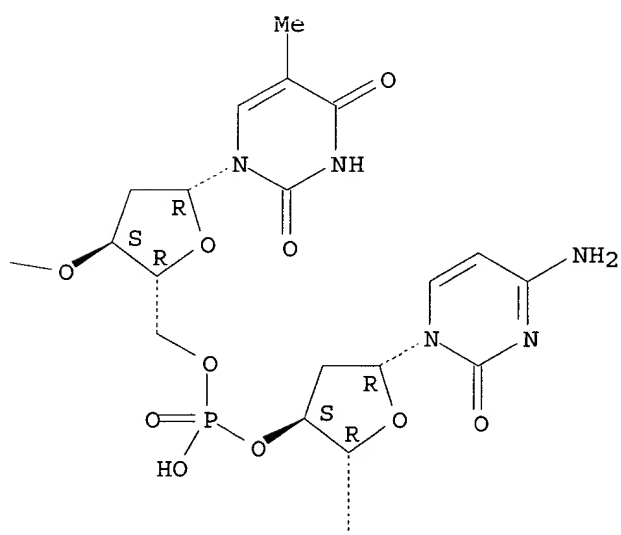
CN Guanosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

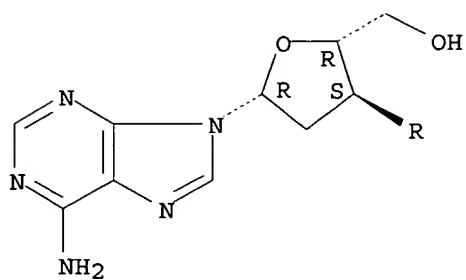
PAGE 2-A



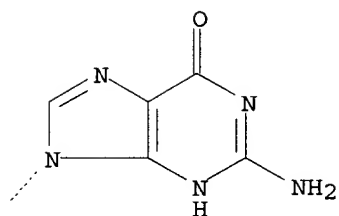
PAGE 2-B



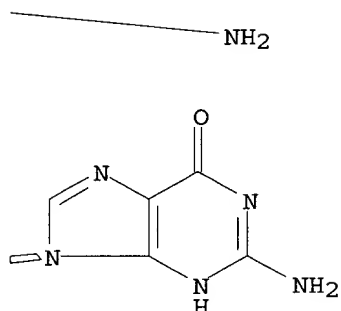
PAGE 1-A



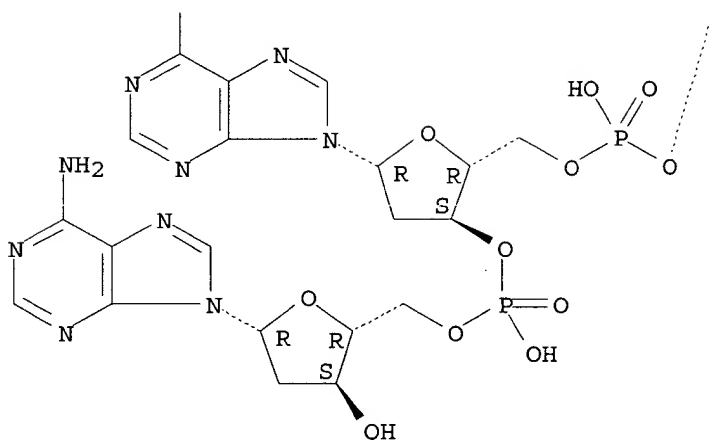
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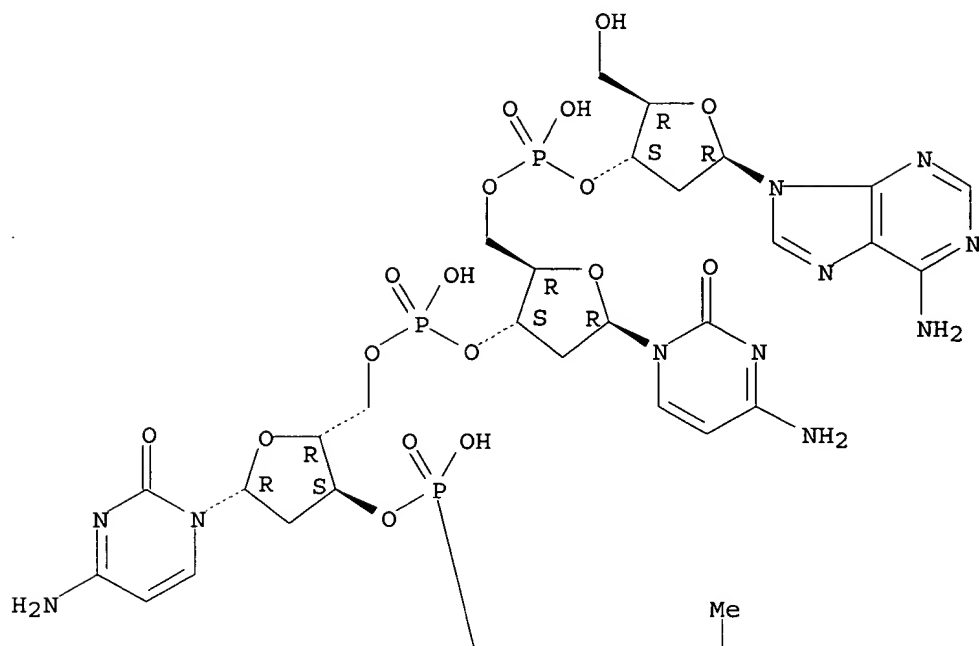


RN 173263-57-5 CAPLUS

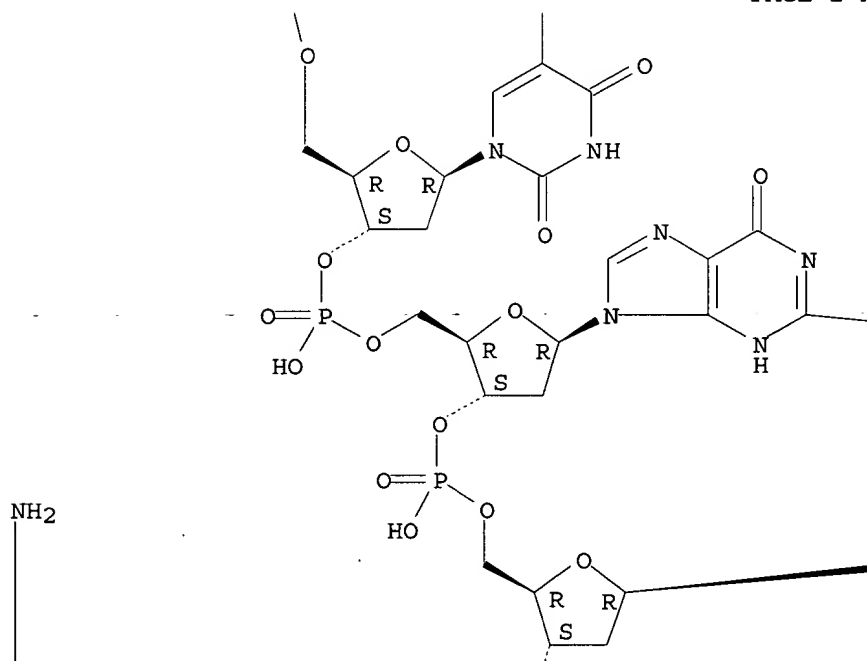
CN Cytidine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

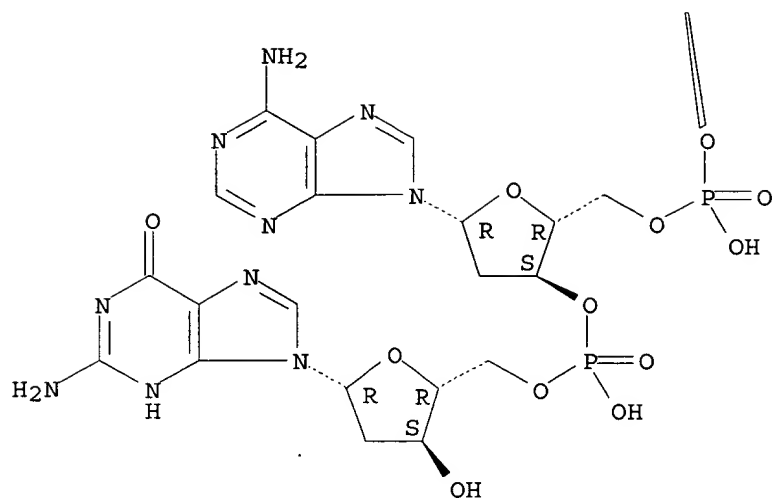
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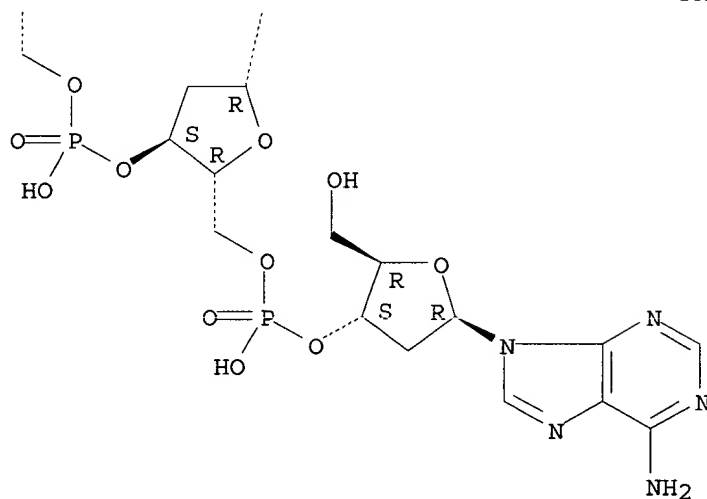
PAGE 2-A



PAGE 2-A



PAGE 2-B

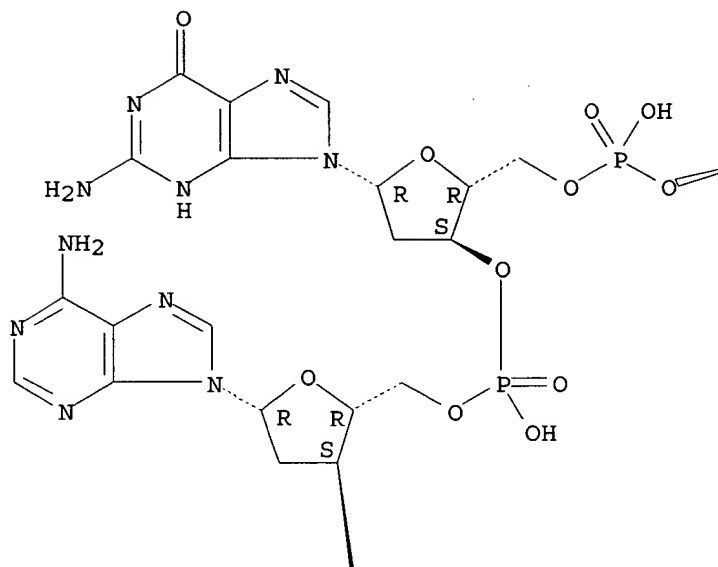


RN 173263-56-4 CAPLUS

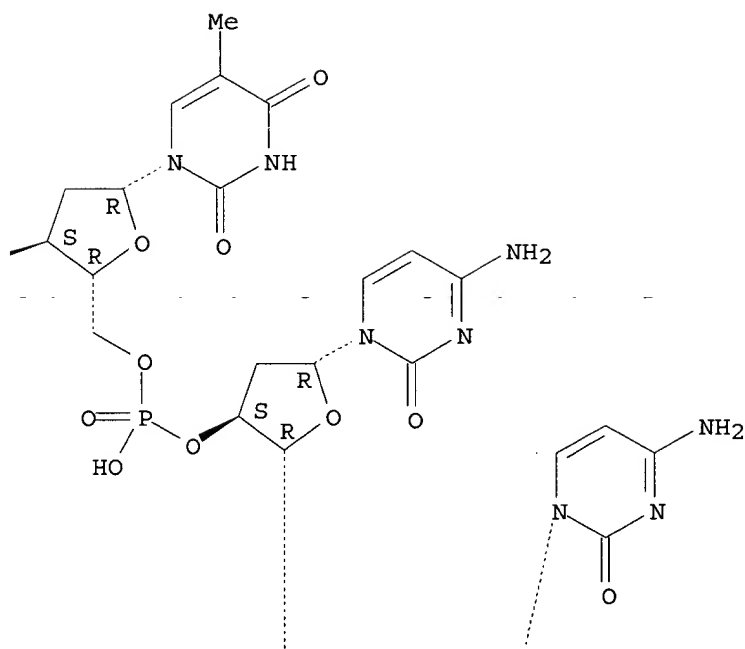
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

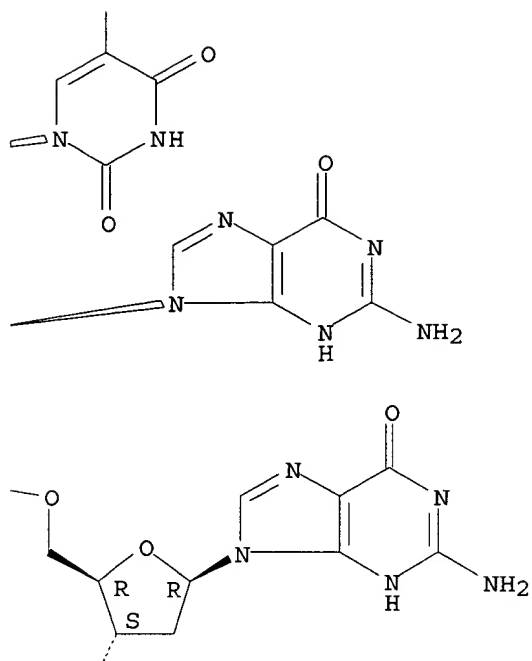
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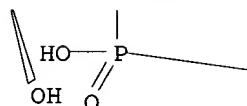
PAGE 1-B



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PAGE 3-A



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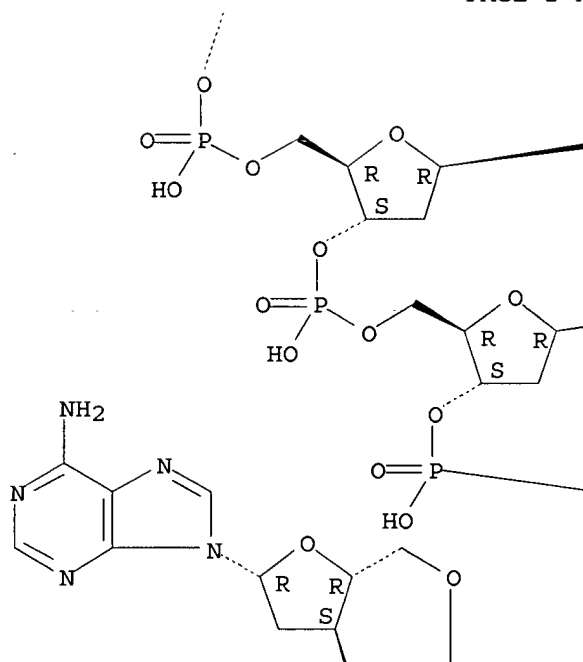
RN 173263-54-2 CAPLUS
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 (3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-
 2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

Me
|

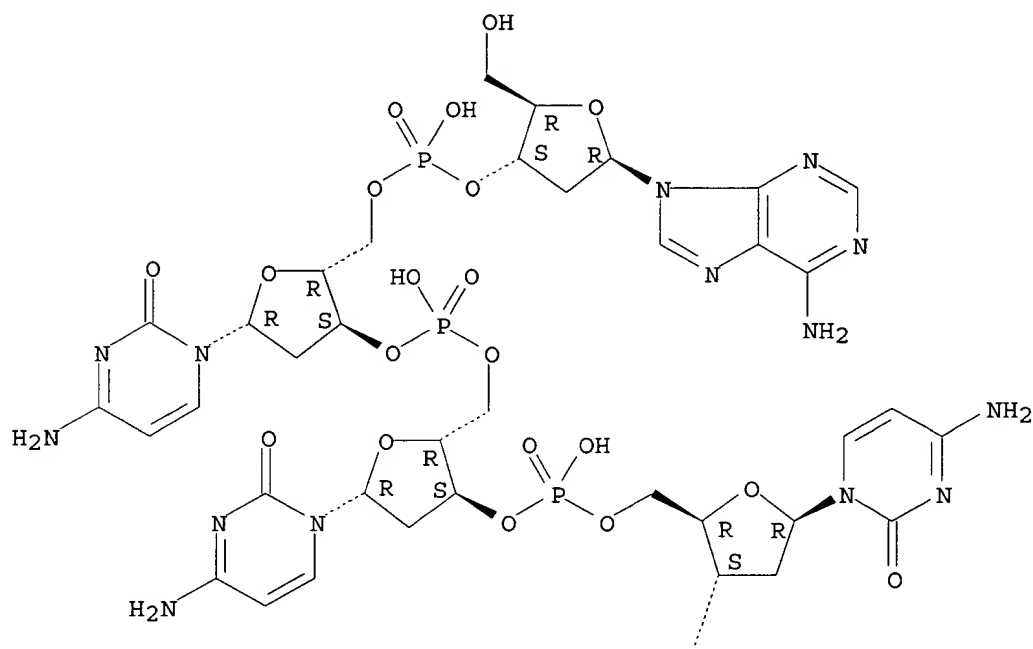
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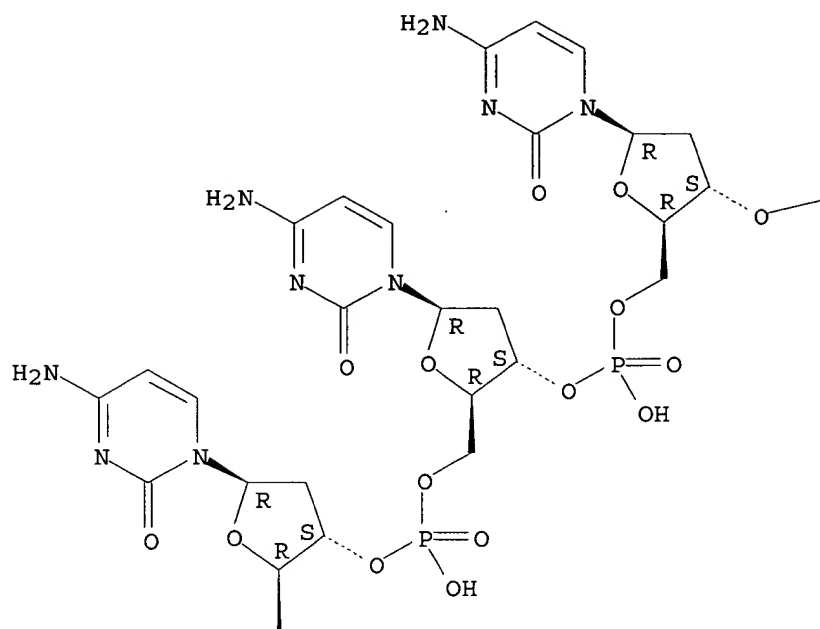
RN 173263-53-1 CAPLUS
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-
2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

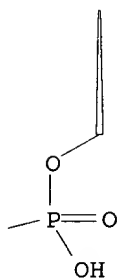
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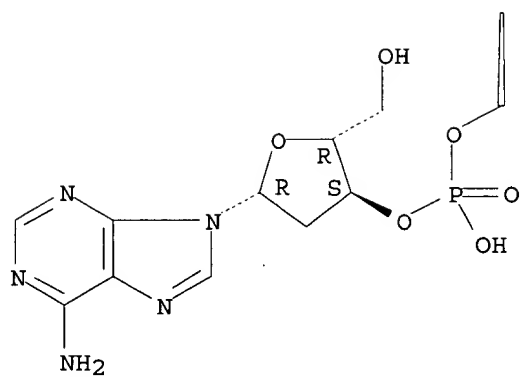
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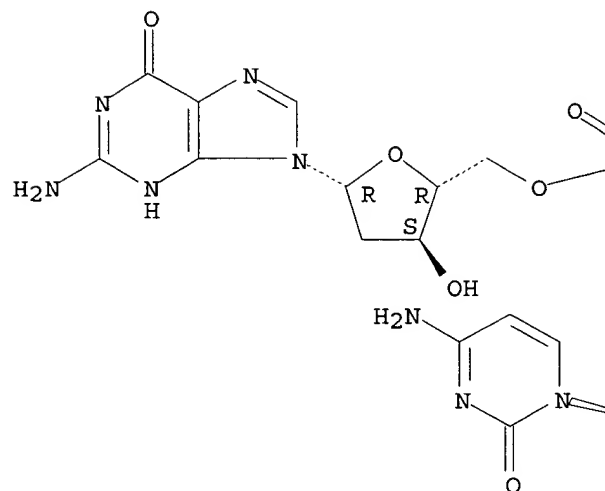
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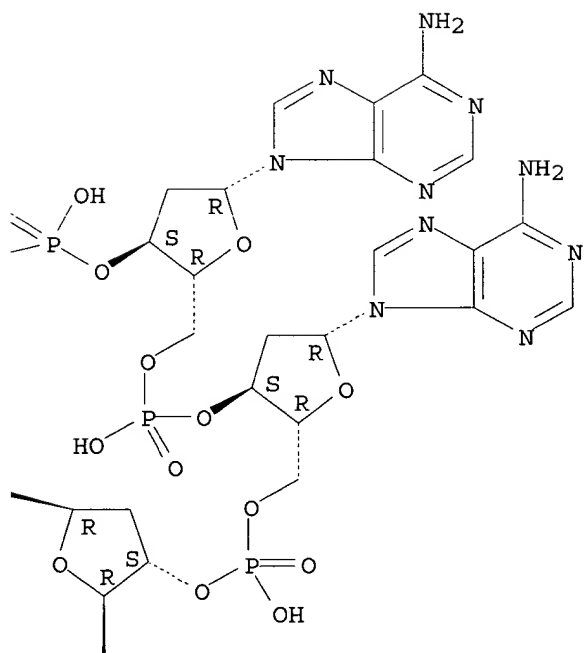
PAGE 3-A

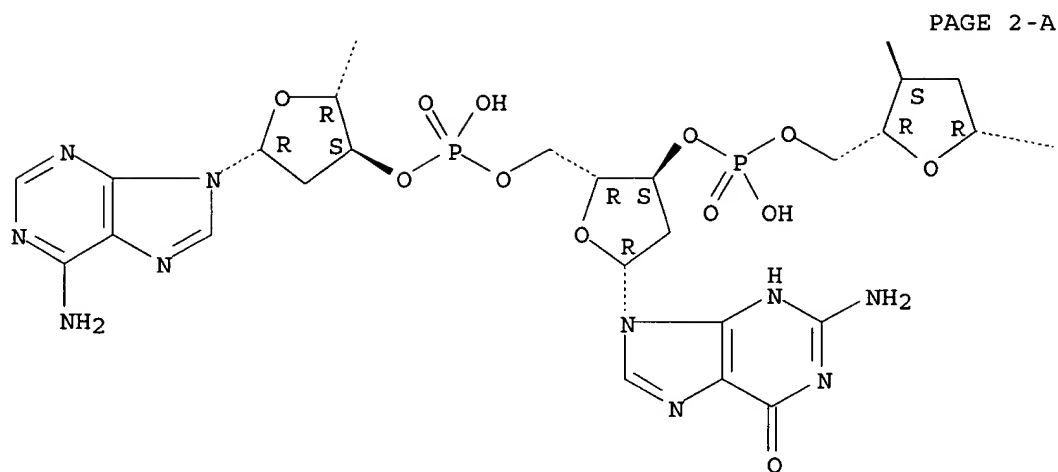


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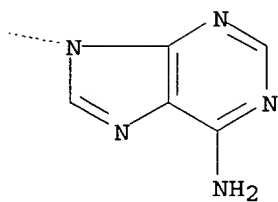


PAGE 1-B





PAGE 2-B

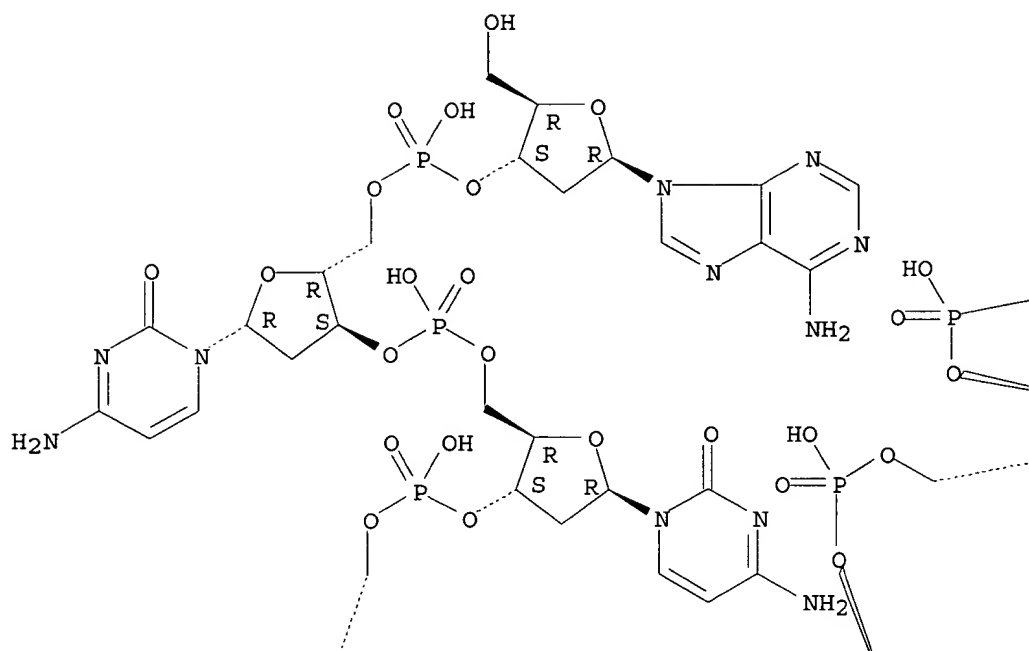


RN 173263-52-0 CAPLUS

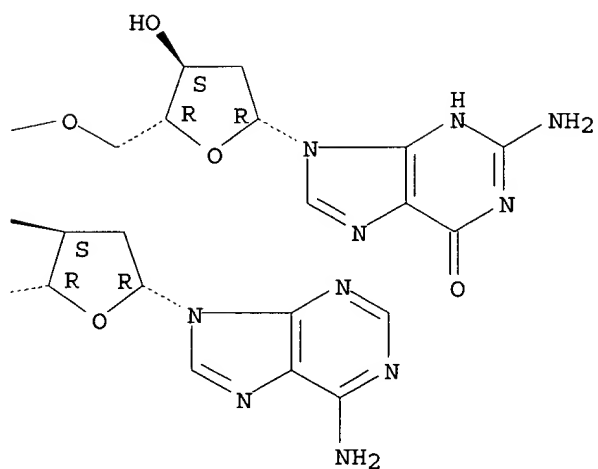
CN Guanosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-
 (3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

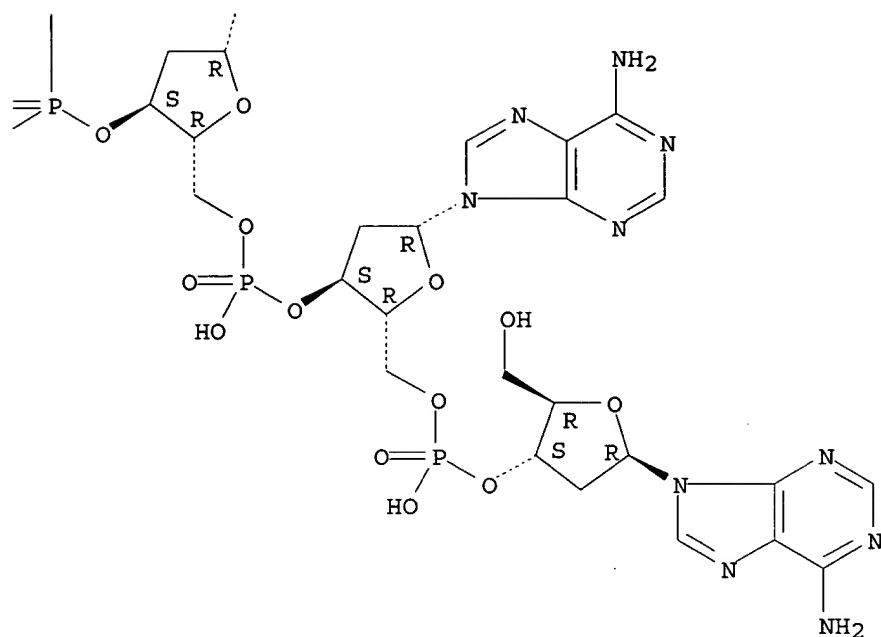
PAGE 1-A



PAGE 1-B



PAGE 2-B

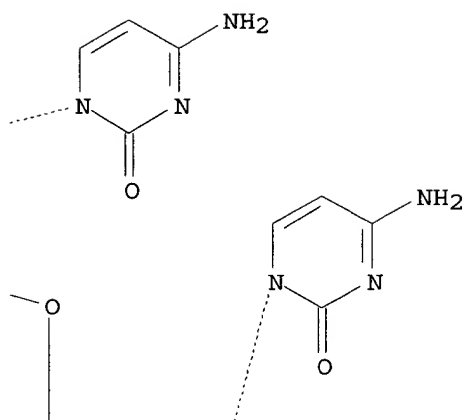


RN 173263-51-9 CAPLUS

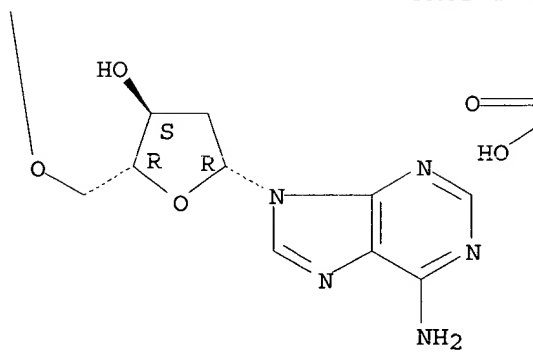
CN Guanosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-
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 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

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purpose, such as identification of cancerous cells. The target nucleic acid may be DNA or mRNA. A set of 151 5'-primers and 30 3'-primers is described.

IT 173263-41-7 173263-51-9 173263-52-0
 173263-53-1 173263-54-2 173263-56-4
 173263-57-5 173263-58-6 173263-69-9
 173263-74-6 173263-90-6 173263-91-7
 173263-94-0 173263-95-1 173263-97-3
 173264-00-1 173264-01-2 173264-04-5
 173264-05-6 173264-07-8 173264-08-9
 173264-09-0 173264-10-3 173264-18-1
 173264-21-6 173264-22-7 173264-23-8
 173264-31-8 173264-32-9 173264-34-1
 173264-41-0 173264-45-4 173264-46-5
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 173264-68-1

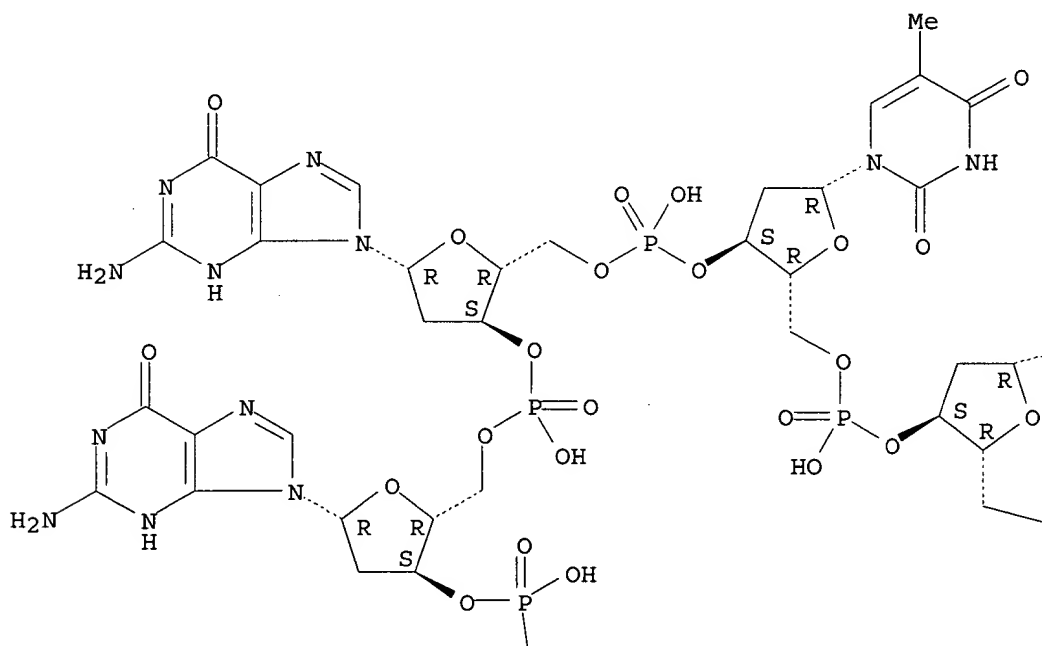
RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (nucleotide sequence, 5'-primer for anal. amplification of nucleic acids; panels of short oligonucleotide primers for use in characterizing DNA sequences and methods for their anal. use)

RN 173263-41-7 CAPLUS

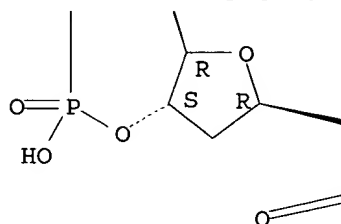
CN Adenosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

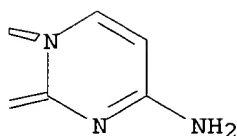
PAGE 1-A



PAGE 3-B



PAGE 3-C



L46 ANSWER 25 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:91933 CAPLUS

DOCUMENT NUMBER: 124:137787

TITLE: Panels of short oligonucleotide primers for use in characterizing DNA sequences and methods for their analytical use

INVENTOR(S): Lopez-Nieto, Carlos Eduardo; Nigam, Sanjay Kumar

PATENT ASSIGNEE(S): Brigham and Women's Hospital, USA

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

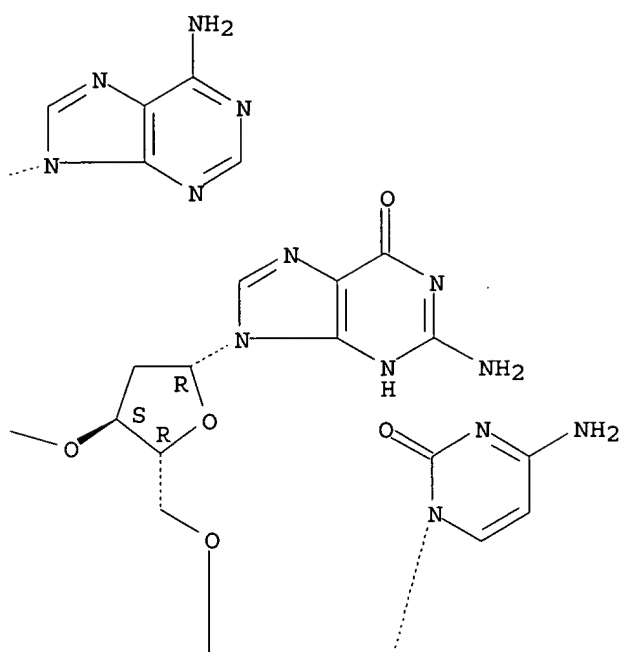
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 9531574 | A1 | 19951123 | WO 1995-US6032 | 19950512 |
| W: AU, CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2190471 | AA | 19951123 | CA 1995-2190471 | 19950512 |
| AU 9525499 | A1 | 19951205 | AU 1995-25499 | 19950512 |
| EP 760009 | A1 | 19970305 | EP 1995-919826 | 19950512 |
| R: CH, DE, FR, GB, LI | | | | |
| JP 10510981 | T2 | 19981027 | JP 1995-529819 | 19950512 |
| US 6110667 | A | 20000829 | US 1996-522384 | 19961115 |
| PRIORITY APPLN. INFO.: | | | US 1994-242887 | A 19940516 |
| | | | WO 1995-US6032 | W 19950512 |

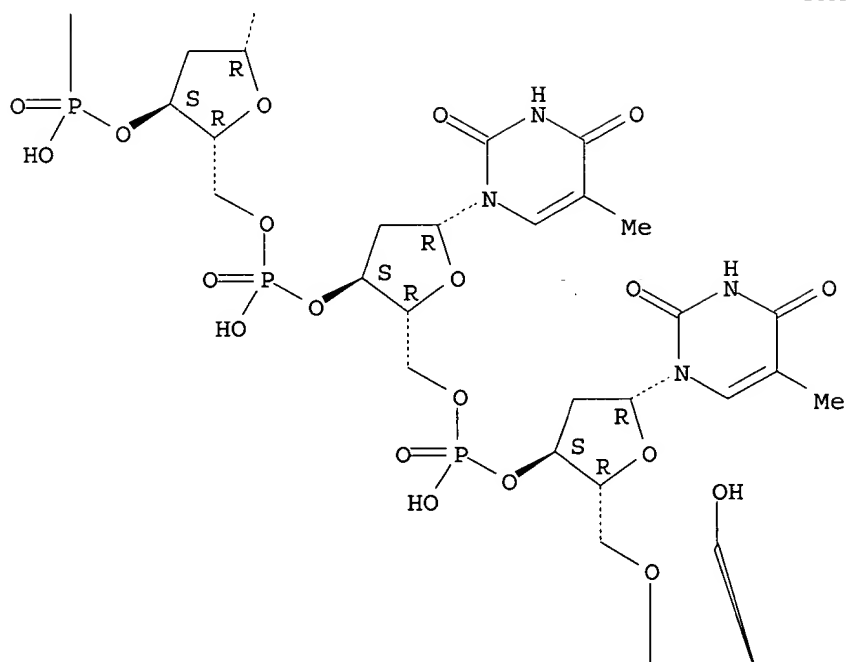
ED Entered STN: 14 Feb 1996

AB A fingerprinting method for nucleic acid acid characterization that uses pairs of short oligonucleotides taken from a large panel as primers in an amplification reactions is described. The fingerprint is defined by the amplification products from different pairs of products. The process may be automated and the panel of primers can be supplied in a kit form with specific subsets having a particular utility being supplied for a defined

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PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 09 May 1996

AB Base substitution mutation frequency is influenced by the sequence context surrounding lesions in the DNA. We have been studying UV mutagenesis in human repair-deficient cells in the supF marker gene carried in a shuttle vector plasmid. There are prominent hotspots, on opposite strands, at the 5' TC sites in the eight base palindrome 5' CTTCGAAG. Recently, we developed a reporter system which permits sequence manipulation in the vicinity of mutational hotspots. We have used the system to characterize the influence of individual positions in the palindrome on the frequency of mutagenesis at the two UV hotspots. In this paper we have determined the contribution of bases at the second and third positions in the palindrome. Changes in bases that were in the primer template duplex when the replication complex encountered the photoproducts at one of the hotspot sites significantly increased or decreased the probability of mutations at the site. We also observed modulation of hotspot activity at other sites as a function of single base changes as much as 80 bases away from the hotspots. In these instances, the site of the changed base was in the unreplicated template ahead of the primer terminus when the polymerase encountered the relevant photoproduct. Our results indicate that sequence context has both proximal and distal consequences for mutagenesis.

IT 149181-78-2

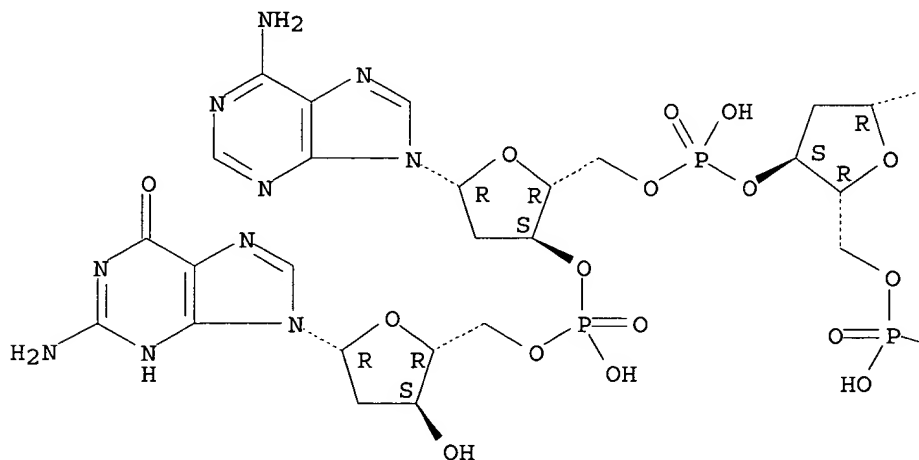
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(single nucleotide positions have proximal and distal influence on UV mutation hotspots and coldspots)

RN 149181-78-2 CAPLUS

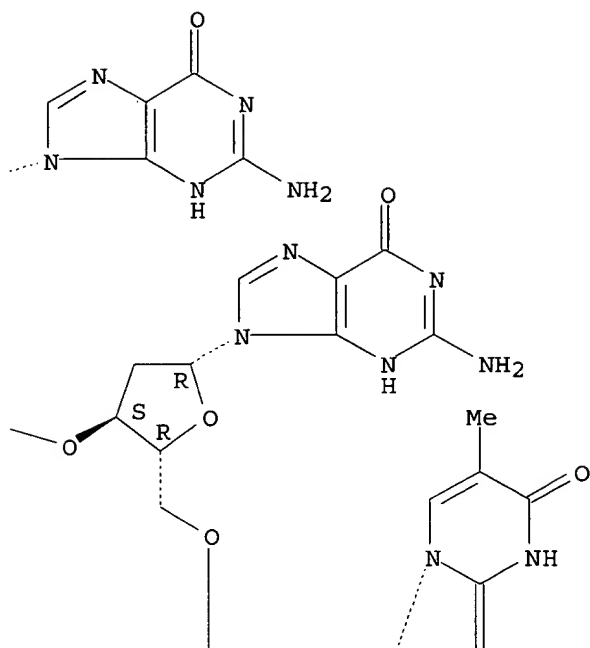
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Absolute stereochemistry.

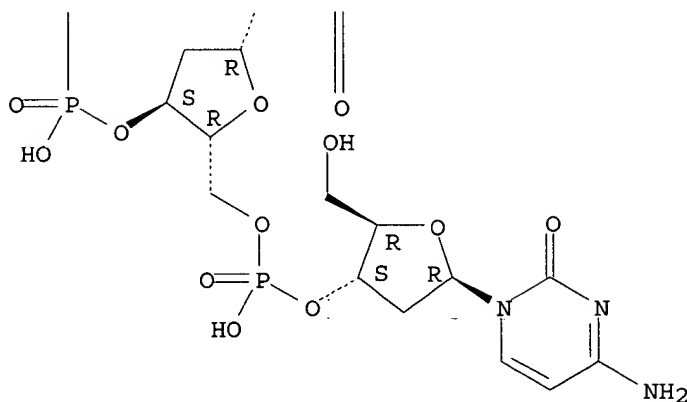
PAGE 1-A



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REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:272042 CAPLUS
 DOCUMENT NUMBER: 124:334799
 TITLE: Single nucleotide positions have proximal and distal influence on UV mutation hotspots and coldspots
 AUTHOR(S): Levy, Dan D.; Magee, Ashalla D.; Seidman, Michael M.
 CORPORATE SOURCE: Laboratory Molecular Carcinogenesis, NCI, NIH, Bethesda, MD, 20892, USA
 SOURCE: Journal of Molecular Biology (1996), 258(2), 251-60
 CODEN: JMOBAK; ISSN: 0022-2836

in relation to the initiator ATG abolished glucose repression. Mutation of a single hexanucleotide sequence 5'GTGGGG at nucleotide -720 was sufficient for derepression. This site is similar to the binding sites of the glucose repressors MIG1 of *Saccharomyces cerevisiae* and CREA/CRE1 of filamentous fungi. Removal of the glucose repressor site did not affect sophorose induction. Sophorose induction of the promoter was retained even in deletion derivs. lacking sequences upstream of position -161, which retained about 70 bp upstream of the transcription start point and only 30 bp upstream of the TATA box.

IT 186416-80-8

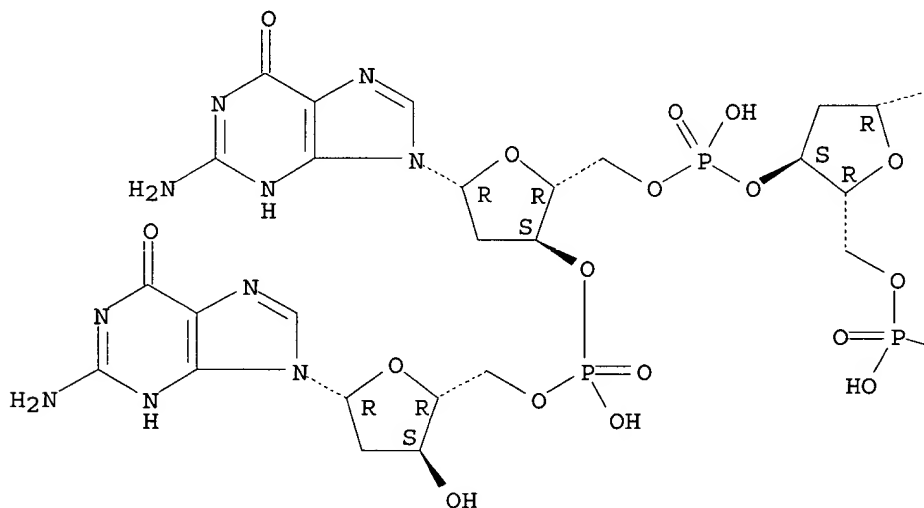
RL: **BAC (Biological activity or effector, except adverse)**; BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; identification of two glucose repressor-binding sites (-1001 and -720) in the cellobiohydrolase I gene promoter of *Trichoderma reesei*)

RN 186416-80-8 CAPLUS

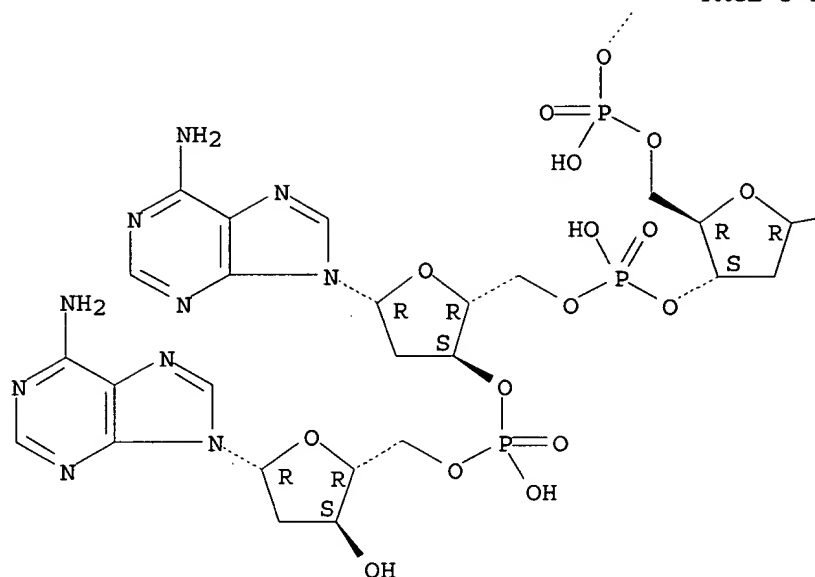
CN Guanosine, 2'-deoxycytidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

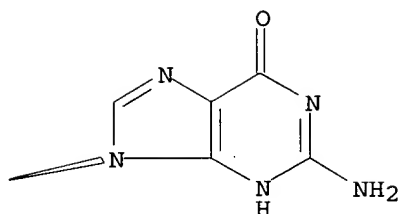
PAGE 1-A



PAGE 3-A

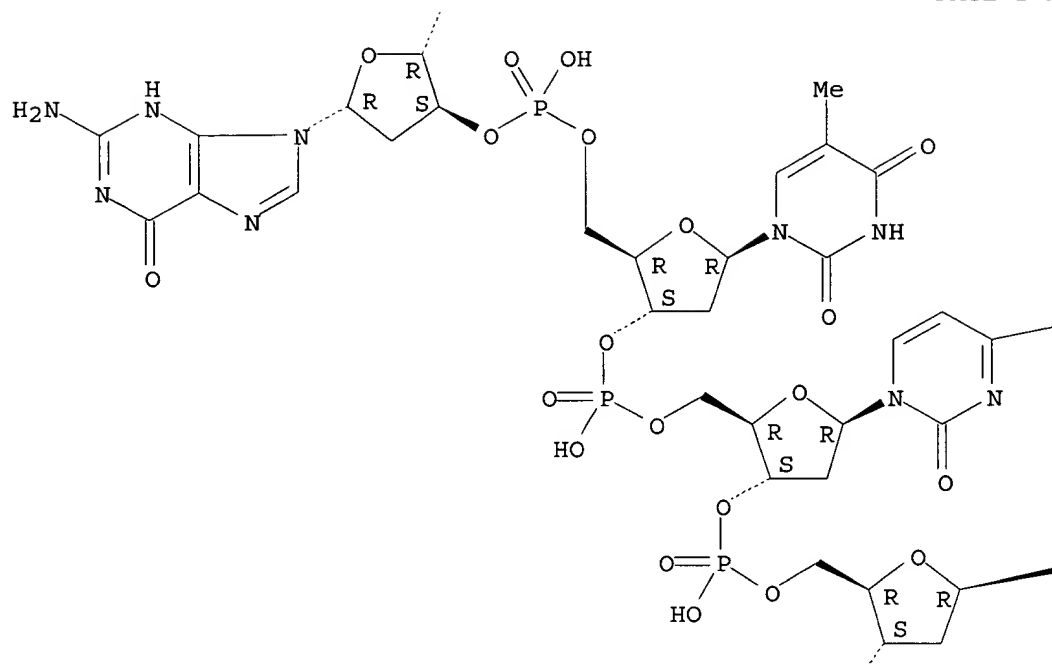


PAGE 3-B

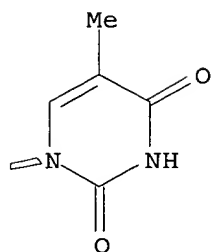
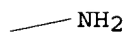


L46 ANSWER 23 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1997:70076 CAPLUS
 DOCUMENT NUMBER: 126:127753
 TITLE: Functional analysis of the cellobiohydrolase I promoter of the filamentous fungus *Trichoderma reesei*
 AUTHOR(S): Ilmen, M.; Onnela, M.-L.; Klemsdal, S.; Penttila, M.
 CORPORATE SOURCE: VTT Biotechnology Food Research, Espoo, FIN-02044, Finland
 SOURCE: Molecular & General Genetics (1996), 253(3), 303-314
 CODEN: MGGEAE; ISSN: 0026-8925
 PUBLISHER: Springer
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 31 Jan 1997
 AB Functional anal. of the cellulase promoter *cbh1* of the filamentous fungus *Trichoderma reesei* was carried out using the *Escherichia coli* *lacZ* gene as a reporter. An assay based on cultivation on solid medium in microtiter plates was developed that allows rapid and reliable semiquant. anal. of β -galactosidase expression of a large number of transformants. A series of deletions and specifically designed alterations were made covering 2.2 kb of the *cbh1* promoter. Removal of sequences upstream of nucleotide -500

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IT 135625-40-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

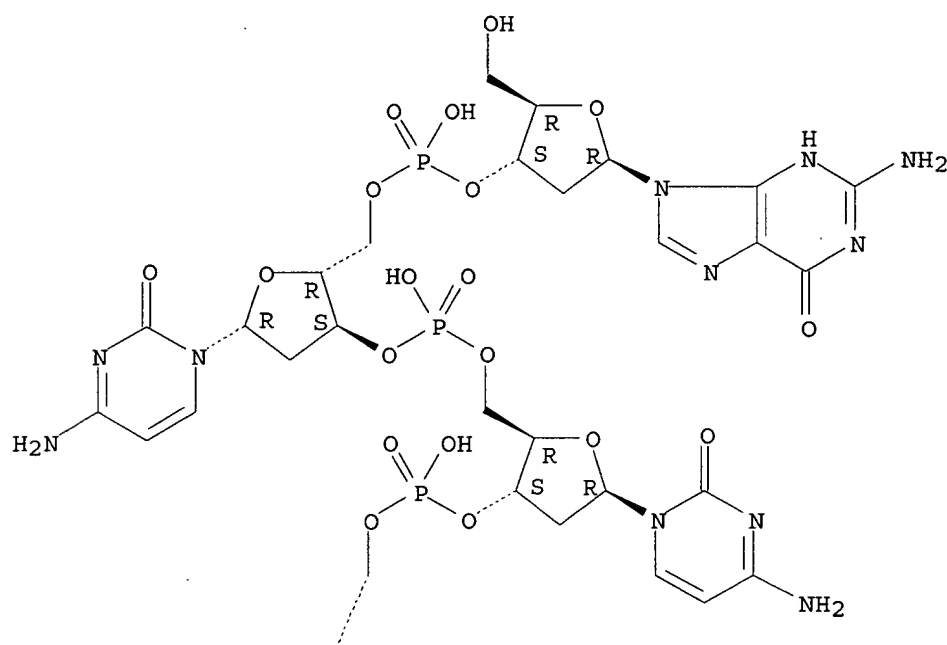
(role of the gonococcal uptake sequence (GCUS) and piliation phenotype in transformation of different concns. of DNA in *Neisseria gonorrhoeae*)

RN 135625-40-0 CAPLUS

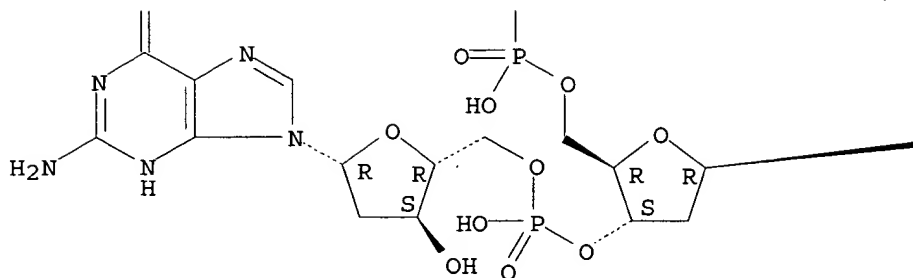
CN Guanosine, 2'-deoxyadenylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-thymidylyl-(5'→3')-2'-deoxycytidylyl-(5'→3')-thymidylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxycytidylyl-(5'→3')-2'-deoxycytidylyl-(5'→3')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

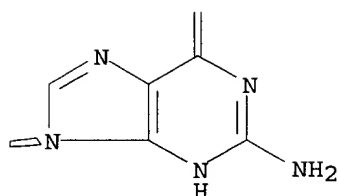
PAGE 1-A



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RN 155902-32-2 CAPLUS
 CN DNA, d(G-T-T-G-G-A-G-A-C-C-G-G-I-G-T-T-G-G-I-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 22 OF 53 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:676294 CAPLUS

DOCUMENT NUMBER: 125:319714

TITLE: Uptake-sequence-independent DNA transformation exists in *Neisseria gonorrhoeae*

AUTHOR(S): Boyle-Vavra, Susan; Seifert, H. Steven

CORPORATE SOURCE: Dep. Microbiol.-Immunology, Northwestern Univ. Medical School, Chicago, IL, 60611, USA

SOURCE: Microbiology (Reading, United Kingdom) (1996), 142(10), 2839-2845

CODEN: MROBEO; ISSN: 1350-0872

PUBLISHER: Society for General Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 16 Nov 1996

AB A DNA transformation dose-response curve of piliated (P+) gonococci with the use of cloned DNA containing a pile2-cat fusion showed saturation at high and

low levels of transforming DNA. At low DNA concns., transformation of the P+ strain MS11-A was effectively inhibited by a 1000-fold molar excess of the gonococcal transformation uptake sequence (GCUS). The same molar excess of the GCUS did not inhibit transformation of MS11-A at high DNA concns. In MS11-B2, a nonpiliated (P-), pilin-nonproducing, isogenic variant of MS11-A, the GCUS did not inhibit transformation at any level of transforming DNA. These data suggest that two mechanisms of transformation exist in P+ cells: one which utilizes the GCUS and one which does not. In MS11-B2 P- cells, no evidence was found for the presence of the GCUS-dependent mechanism, suggesting that transformation in this background occurs solely by the GCUS-independent mechanism.

CA INDEXING IS CURRENT THROUGH 29 Sep 2005 (20050929/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Sep 2005 (20050929/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

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>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

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>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<
```

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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L14      6113380 SEA FILE=REGISTRY ABB=ON  SQL<46 AND NS/FS
L15      1667 SEA FILE=REGISTRY ABB=ON  RRI[IG]YY/SQSN
L16      1612 SEA FILE=REGISTRY ABB=ON  L14 AND L15
L20      STR
L22      2568 SEA FILE=REGISTRY SSS FUL L20
L36      639 SEA FILE=USPATFULL ABB=ON  L16 OR L22
L37      185 SEA FILE=USPATFULL ABB=ON  L36 NOT AY>1997
L38      10501 SEA FILE=USPATFULL ABB=ON  (IMMUNOSTIM? OR IMMUNOMOD? OR
      IMMUNOSUPPRES?)/IT
L39      8 SEA FILE=USPATFULL ABB=ON  L37 AND L38
L40      64 SEA FILE=USPATFULL ABB=ON  L36(L) (PHARMAC? OR THERAP?)/IT
L41      13 SEA FILE=USPATFULL ABB=ON  L37 AND L40
L42      16 SEA FILE=USPATFULL ABB=ON  L39 OR L41
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73 L16
L48      0 (L42 AND L16) NOT L45
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*seq. search answers not included
in structure search
answer set*

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=> fil capl;d ibib ed abs hitseq l47 1
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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L47 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:716750 CAPLUS

DOCUMENT NUMBER: 136:243732

TITLE: Nucleic acid-based ribozyme and DNAzyme modulators of gene expression

INVENTOR(S): Mcswiggen, James; Usman, Nassim; Blatt, Lawrence; Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander; Matulic-Adamic, Jasenka; Sweedler, David; Draper, Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry, Amber; Zinnen, Shawn; Ludwig, Janos; Sproat, Brian S.

PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 717 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001016312 A3 | | 20010809 | WO 2000-US23998 | 20000830 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-PV151713 | 19990831 |
| | | | US 1999-406643 | 19990927 |
| | | | US 1999-PV156467 | 19990927 |
| | | | US 1999-PV156236 | 19990927 |
| | | | US 1999-436430 | 19991108 |
| | | | US 1999-PV169100 | 19991206 |
| | | | US 1999-PV173612 | 19991229 |
| | | | US 1999-474432 | 19991229 |
| | | | US 1999-476387 | 19991230 |
| | | | US 2000-498824 | 20000204 |
| | | | US 2000-531025 | 20000320 |
| | | | US 2000-PV197769 | 20000414 |
| | | | US 2000-578223 | 20000523 |

ED Entered STN: 02 Oct 2001

AB Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex

DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β -secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record is the fifth of six records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT 402796-95-6 402796-98-9 402797-02-8
402797-14-2 402797-21-1 402797-48-2
402797-57-3 402797-94-8 402798-13-4
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402807-95-8 402808-02-0 402808-09-7
402808-13-3 402808-18-8 402808-24-6
402808-28-0 402808-41-7 402808-48-4
402808-61-1 402808-65-5 402808-75-7
402808-78-0 402808-80-4 402808-85-9
402808-93-9 402809-12-5

RL: BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(NCH ribozyme specific for human HER2/neu mRNA; nucleic acid-based
ribozyme and DNazyme modulators of gene expression)

RN 402796-95-6 CAPLUS
CN RNA, (G-G-G-G-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-A-

C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402796-98-9 CAPLUS

CN RNA, (A-C-C-A-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-02-8 CAPLUS

CN RNA, (C-U-G-C-C-C-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-14-2 CAPLUS

CN RNA, (C-A-G-U-A-A-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-21-1 CAPLUS

CN RNA, (G-G-G-G-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-48-2 CAPLUS

CN RNA, (G-G-C-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-57-3 CAPLUS

CN RNA, (C-G-G-C-A-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402797-94-8 CAPLUS

CN RNA, (U-C-C-A-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-U-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-13-4 CAPLUS

CN RNA, (G-A-G-U-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-U-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-28-1 CAPLUS

CN RNA, (G-A-A-G-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-44-1 CAPLUS

CN RNA, (C-C-U-C-A-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-67-8 CAPLUS

CN RNA, (G-U-U-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-U-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-79-2 CAPLUS

CN RNA, (C-C-U-G-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C

C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-85-0 CAPLUS

CN RNA, (C-U-C-C-C-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-90-7 CAPLUS

CN RNA, (C-U-C-U-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402798-98-5 CAPLUS

CN RNA, (G-A-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-15-9 CAPLUS

CN RNA, (A-G-C-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-28-4 CAPLUS

CN RNA, (G-G-G-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-G-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-45-5 CAPLUS

CN RNA, (G-C-G-C-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-56-8 CAPLUS

CN RNA, (U-G-G-G-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-72-8 CAPLUS

CN RNA, (G-U-G-C-U-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-G-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-82-0 CAPLUS

CN RNA, (U-G-G-A-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402799-90-0 CAPLUS

CN RNA, (G-C-C-A-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-01-5 CAPLUS

CN RNA, (G-U-G-A-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-48-0 CAPLUS

CN RNA, (C-A-C-C-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-

U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-56-0 CAPLUS

CN RNA, (G-G-G-C-A-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-77-5 CAPLUS

CN RNA, (A-A-A-U-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-C-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-83-3 CAPLUS

CN RNA, (G-G-A-G-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-86-6 CAPLUS

CN RNA, (G-U-G-U-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402800-98-0 CAPLUS

CN RNA, (G-C-U-G-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-16-5 CAPLUS

CN RNA, (G-U-C-A-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-20-1 CAPLUS

CN RNA, (G-A-C-G-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-26-7 CAPLUS

CN RNA, (U-A-C-U-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-36-9 CAPLUS

CN RNA, (C-C-U-U-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-52-9 CAPLUS

CN RNA, (U-G-G-A-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-G-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-73-4 CAPLUS

CN RNA, (A-A-A-G-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-77-8 CAPLUS

CN RNA, (U-U-G-G-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-

C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-92-7 CAPLUS

CN RNA, (C-G-U-C-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-G-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-94-9 CAPLUS

CN RNA, (G-C-A-G-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402801-96-1 CAPLUS

CN RNA, (U-G-G-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-09-9 CAPLUS

CN RNA, (A-C-U-G-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-18-0 CAPLUS

CN RNA, (A-A-G-G-A-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-22-6 CAPLUS

CN RNA, (G-C-A-C-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-43-1 CAPLUS

CN RNA, (C-A-U-U-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-49-7 CAPLUS

CN RNA, (C-C-A-A-A-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-53-3 CAPLUS

CN RNA, (C-A-C-A-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-55-5 CAPLUS

CN RNA, (U-G-G-G-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-61-3 CAPLUS

CN RNA, (G-A-A-G-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-68-0 CAPLUS

CN RNA, (G-G-G-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-

C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-75-9 CAPLUS

CN RNA, (A-G-A-G-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-U-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-77-1 CAPLUS

CN RNA, (G-U-A-G-G-A-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402802-92-0 CAPLUS

CN RNA, (U-G-G-G-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-07-0 CAPLUS

CN RNA, (G-U-C-A-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-16-1 CAPLUS

CN RNA, (A-G-A-G-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-18-3 CAPLUS

CN RNA, (C-G-U-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-52-5 CAPLUS

CN RNA, (C-U-G-C-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-72-9 CAPLUS

CN RNA, (A-C-U-U-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402803-82-1 CAPLUS

CN RNA, (U-C-U-U-U-G-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-18-6 CAPLUS

CN RNA, (C-C-G-G-A-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-U-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-28-8 CAPLUS

CN RNA, (G-U-U-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-49-3 CAPLUS

CN RNA, (U-U-U-G-A-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-

G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-83-5 CAPLUS

CN RNA, (U-A-A-G-G-U-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-85-7 CAPLUS

CN RNA, (C-A-U-C-G-U-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-U-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-90-4 CAPLUS

CN RNA, (A-U-C-U-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402804-95-9 CAPLUS

CN RNA, (U-U-C-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-03-2 CAPLUS

CN RNA, (A-G-A-U-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-19-0 CAPLUS

CN RNA, (G-G-A-A-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-27-0 CAPLUS

CN RNA, (G-G-G-U-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-29-2 CAPLUS

CN RNA, (G-C-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-39-4 CAPLUS

CN RNA, (A-C-U-G-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-42-9 CAPLUS

CN RNA, (A-A-G-G-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-58-7 CAPLUS

CN RNA, (A-U-C-C-A-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-72-5 CAPLUS

CN RNA, (C-G-G-G-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-U-

G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-93-0 CAPLUS

CN RNA, (U-A-G-U-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402805-98-5 CAPLUS

CN RNA, (C-U-U-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-C-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-02-4 CAPLUS

CN RNA, (G-A-C-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-19-3 CAPLUS

CN RNA, (C-A-U-U-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-22-8 CAPLUS

CN RNA, (A-G-C-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-26-2 CAPLUS

CN RNA, (U-G-U-G-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-34-2 CAPLUS

CN RNA, (A-G-G-G-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-38-6 CAPLUS

CN RNA, (C-U-G-U-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-44-4 CAPLUS

CN RNA, (U-A-C-U-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-65-9 CAPLUS

CN RNA, (G-G-G-C-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-A-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-68-2 CAPLUS

CN RNA, (A-G-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-73-9 CAPLUS

CN RNA, (C-A-U-A-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-

G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-75-1 CAPLUS

CN RNA, (A-U-C-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-77-3 CAPLUS

CN RNA, (G-A-A-C-A-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-79-5 CAPLUS

CN RNA, (G-G-G-G-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-83-1 CAPLUS

CN RNA, (G-C-G-A-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402806-91-1 CAPLUS

CN RNA, (A-G-G-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-00-5 CAPLUS

CN RNA, (C-A-C-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-07-2 CAPLUS

CN RNA, (G-A-G-U-C-U-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-21-0 CAPLUS

CN RNA, (G-U-A-C-U-C-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-36-7 CAPLUS

CN RNA, (G-A-G-G-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-A-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-50-5 CAPLUS

CN RNA, (G-A-A-G-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-53-8 CAPLUS

CN RNA, (U-U-G-U-C-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-56-1 CAPLUS

CN RNA, (G-U-A-A-U-A-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-G-

U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-60-7 CAPLUS

CN RNA, (U-G-G-G-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-62-9 CAPLUS

CN RNA, (C-U-C-U-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-81-2 CAPLUS

CN RNA, (G-U-A-C-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-89-0 CAPLUS

CN RNA, (G-G-C-C-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-91-4 CAPLUS

CN RNA, (G-C-G-G-A-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402807-95-8 CAPLUS

CN RNA, (C-A-C-A-U-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-02-0 CAPLUS

CN RNA, (A-G-A-A-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-09-7 CAPLUS

CN RNA, (G-G-U-C-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-C-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-13-3 CAPLUS

CN RNA, (C-U-G-G-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-G-G-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-18-8 CAPLUS

CN RNA, (G-C-A-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-C-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-24-6 CAPLUS

CN RNA, (U-U-A-G-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-28-0 CAPLUS

CN RNA, (G-G-A-A-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-C-

C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-41-7 CAPLUS

CN RNA, (U-C-C-A-A-C-G-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-G-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-48-4 CAPLUS

CN RNA, (U-U-G-G-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-61-1 CAPLUS

CN RNA, (C-C-A-A-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-G-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-65-5 CAPLUS

CN RNA, (A-A-G-G-A-A-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-A-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-75-7 CAPLUS

CN RNA, (U-U-C-C-C-U-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-U-U-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-78-0 CAPLUS

CN RNA, (C-C-C-U-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-80-4 CAPLUS

CN RNA, (U-C-C-C-U-U-A-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-C-C-G-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-85-9 CAPLUS

CN RNA, (U-C-U-G-A-A-A-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-G-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402808-93-9 CAPLUS

CN RNA, (C-A-G-U-A-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-U-U-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 402809-12-5 CAPLUS

CN RNA, (U-C-C-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-A-A-A-G-G-C-C-G-A-A-I-G-U-C-U-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 401962-96-7 401963-17-5 401963-20-0

401963-47-1 401963-67-5 401964-51-0

401964-92-9 401965-02-4 401965-21-7

401965-29-5 401965-41-1 401965-44-4

401965-46-6

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NCH ribozyme specific for human phospholamban mRNA; nucleic acid-based
ribozyme and DNAzyme modulators of gene expression)

RN 401962-96-7 CAPLUS
CN RNA, (U-G-A-A-G-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-
G-A-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ugaaguucuu gaugaggccg uuaggccgaa igucgaga

RN 401963-17-5 CAPLUS
CN RNA, (U-U-U-C-A-A-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-
C-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 uuucaaugcu gaugaggccg uuaggccgaa igcucuuc

RN 401963-20-0 CAPLUS
CN RNA, (G-A-G-G-C-A-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-
G-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gaggcauucu gaugaggccg uuaggccgaa iguugagg

RN 401963-47-1 CAPLUS
CN RNA, (C-U-G-C-A-G-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-
G-U-A-G) (9CI) (CA INDEX NAME)

SEQ 1 cugcagaucu gaugaggccg uuaggccgaa iguuguag

RN 401963-67-5 CAPLUS
CN RNA, (C-U-A-C-U-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-
U-G-U-U) (9CI) (CA INDEX NAME)

SEQ 1 cuacucagcu gaugaggccg uuaggccgaa igucuguu

RN 401964-51-0 CAPLUS
CN RNA, (U-A-U-G-U-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-
U-U-A-C) (9CI) (CA INDEX NAME)

SEQ 1 uauguaagcu gaugaggccg uuaggccgaa igccuac

RN 401964-92-9 CAPLUS
CN RNA, (U-C-U-G-A-A-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-
U-C-A-U) (9CI) (CA INDEX NAME)

SEQ 1 ucugaagucu gaugaggccg uuaggccgaa iguuuau

RN 401965-02-4 CAPLUS

CN RNA, (G-C-A-U-U-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-A-A) (9CI) (CA INDEX NAME)

SEQ 1 gcuuuggacu gaugaggccg uuaggccgaa igcuggaa

RN 401965-21-7 CAPLUS

CN RNA, (G-A-U-G-U-A-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-A-C-A) (9CI) (CA INDEX NAME)

SEQ 1 gauguaaucu gaugaggccg uuaggccgaa igccaaca

RN 401965-29-5 CAPLUS

CN RNA, (C-C-C-C-A-U-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-G-C-U) (9CI) (CA INDEX NAME)

SEQ 1 ccccaugucu gaugaggccg uuaggccgaa igucagcu

RN 401965-41-1 CAPLUS

CN RNA, (A-U-G-G-U-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-A-U-U-A) (9CI) (CA INDEX NAME)

SEQ 1 auggucaacu gaugaggccg uuaggccgaa igcuauua

RN 401965-44-4 CAPLUS

CN RNA, (C-A-G-U-A-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-A-U-A) (9CI) (CA INDEX NAME)

SEQ 1 caguaaggcu gaugaggccg uuaggccgaa igucaaua

RN 401965-46-6 CAPLUS

CN RNA, (A-U-G-U-U-A-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-A-U-G) (9CI) (CA INDEX NAME)

SEQ 1 auguuauccu gaugaggccg uuaggccgaa iguuuau

=> d ibib ed abs hitseq l47 2-14; fil hom

L47 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:598168 CAPLUS

DOCUMENT NUMBER: 135:192168

TITLE: Enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression

INVENTOR(S): Blatt, Lawrence; Mcswiggen, James; Chowrira, Bharat M.

PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 200 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001059103 A2 | | 20010816 | WO 2001-US4273 | 20010209 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR | | | | |
| PRIORITY APPLN. INFO.: | | | US 2000-PV181797 | 20000211 |
| | | | US 2000-PV185516 | 20000228 |
| | | | US 2000-PV187128 | 20000306 |

ED Entered STN: 17 Aug 2001

AB The present invention relates to nucleic acid mols., including antisense and enzymic nucleic acid mols., such as hammerhead ribozymes, DNazymes, and antisense oligonucleotides, which modulate the expression of the human CD20 and/or NOGO genes. The known sequences of human CD20 and NOGO mRNAs are screened for accessible sites using a computer-folding algorithm for regions that do not form secondary folding structures and thus may act as binding/cleaving sites. Thousands of target site and enzymic nucleic acid sequences are provided (hammerhead, Inozymes G-cleaver, Zinzymes Amberzymes, and DNazymes). Several oncol. models in rodent, rabbit, and non-human primates are utilized to evaluate the therapeutic potential of anti-CD20 enzymic nucleic acids. Diagnostic systems and methods for detecting the presence of nucleic acids are further disclosed, using a ribozyme effector mol. and nucleic acid inhibitors complementary to the ribozyme and nucleic acid-based reporter mols. [This abstract record is the first of two records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 355872-41-2P 355872-44-5P 355872-59-2P

355872-61-6P 355872-69-4P 355872-77-4P

355873-29-9P 355873-54-0P 355873-92-6P

355874-11-2P 355874-22-5P 355874-65-6P

355874-68-9P 355874-77-0P 355874-96-3P

355875-07-9P 355875-34-2P 355875-56-8P

RL: BAC (Biological activity or effector, except adverse); BPN

(Biosynthetic preparation); BSU (Biological study, unclassified); PRP

(Properties); THU (Therapeutic use); BIOL (Biological study);

PREP (Preparation); USES (Uses)

(Inozyme specific for human CD20 mRNA; enzymic nucleic acids for the modulation and diagnosis of human CD20 and NOGO gene expression)

RN 355872-41-2 CAPLUS
CN RNA, (A-A-U-C-U-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-A-U-U) (9CI) (CA INDEX NAME)

SEQ 1 aaucucaacu gaugaggccg uuaggccgaa igcugauu

RN 355872-44-5 CAPLUS
CN RNA, (A-G-U-C-U-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-A) (9CI) (CA INDEX NAME)

SEQ 1 agucuccacu gaugaggccg uuaggccgaa igccucaa

RN 355872-59-2 CAPLUS
CN RNA, (C-C-U-U-U-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-U-G-C) (9CI) (CA INDEX NAME)

SEQ 1 ccuuucaucu gaugaggccg uuaggccgaa igcucugc

RN 355872-61-6 CAPLUS
CN RNA, (U-A-G-C-A-A-U-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 uagcaauacu gaugaggccg uuaggccgaa igccuuuc

RN 355872-69-4 CAPLUS
CN RNA, (C-U-G-A-A-G-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cugaagagcu gaugaggccg uuaggccgaa iguuuugg

RN 355872-77-4 CAPLUS
CN RNA, (U-U-U-G-C-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-C-C) (9CI) (CA INDEX NAME)

SEQ 1 uuugcgugcu gaugaggccg uuaggccgaa igcccacc

RN 355873-29-9 CAPLUS
CN RNA, (C-A-G-C-A-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-A-A-U) (9CI) (CA INDEX NAME)

SEQ 1 cagcaaagcu gaugaggccg uuaggccgaa igcucaau

RN 355873-54-0 CAPLUS
CN RNA, (G-G-A-U-U-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-A-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ggauuagccu gaugaggccg uuaggccgaa iguucaca

RN 355873-92-6 CAPLUS
CN RNA, (U-U-A-G-A-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 uuagauuucu gaugaggccg uuaggccgaa igucugga

RN 355874-11-2 CAPLUS
CN RNA, (U-C-A-U-U-C-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ucauucuucu gaugaggccg uuaggccgaa iguuggga

RN 355874-22-5 CAPLUS
CN RNA, (U-C-U-U-G-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ucuuggggcu gaugaggccg uuaggccgaa iguucugg

RN 355874-65-6 CAPLUS
CN RNA, (C-C-A-U-G-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-A-U) (9CI) (CA INDEX NAME)

SEQ 1 ccaugcaacu gaugaggccg uuaggccgaa igccagau

RN 355874-68-9 CAPLUS
CN RNA, (A-G-G-A-G-C-U-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 aggagcuacu gaugaggccg uuaggccgaa igucacuc

RN 355874-77-0 CAPLUS
CN RNA, (U-G-C-U-A-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-A-C-A-U) (9CI) (CA INDEX NAME)

SEQ 1 ugcuaacaacu gaugaggccg uuaggccgaa igcuacau

RN 355874-96-3 CAPLUS

CN RNA, (C-A-A-G-G-A-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-G-U-A) (9CI) (CA INDEX NAME)

SEQ 1 caaggaaccu gaugaggccg uuaggccgaa iguuagua

RN 355875-07-9 CAPLUS

CN RNA, (A-G-U-C-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 agucuccccu gaugaggccg uuaggccgaa iguugcug

RN 355875-34-2 CAPLUS

CN RNA, (A-A-U-G-G-A-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-U-G-U) (9CI) (CA INDEX NAME)

SEQ 1 aauggaauuc gaugaggccg uuaggccgaa iguucugu

RN 355875-56-8 CAPLUS

CN RNA, (A-U-G-G-G-U-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-A-U-U-U) (9CI) (CA INDEX NAME)

SEQ 1 augggugucu gaugaggccg uuaggccgaa igcuauuu

L47 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:475327 CAPLUS

DOCUMENT NUMBER: 135:207449

TITLE: Nucleic acid-based ribozyme and DNzyme modulators of gene expression

INVENTOR(S): McSwiggen, James; Usman, Nassim; Blatt, Lawrence; Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander; Matulic-Adamic, Jasenka; Sweedler, David; Draper, Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry, Amber; Zinnen, Shawn; Lugwig, Janos; Sproat, Brian S.

PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 717 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| WO 2001016312 A2 | | 20010308 | WO 2000-US23998 | 20000830 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, | | | | |
| CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, | | | | |
| IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, | | | | |
| MD, MG, MK, MN, MW, MX, MZ, NO, NZ | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, | | | | |
| GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-PV151713 | 19990831 |
| | | | US 1999-406643 | 19990927 |
| | | | US 1999-PV156467 | 19990927 |
| | | | US 1999-PV156236 | 19990927 |
| | | | US 1999-436430 | 19991108 |
| | | | US 1999-PV169100 | 19991206 |
| | | | US 1999-PV173612 | 19991229 |
| | | | US 1999-474432 | 19991229 |
| | | | US 1999-476387 | 19991230 |
| | | | US 2000-498824 | 20000204 |
| | | | US 2000-531025 | 20000320 |
| | | | US 2000-PV197769 | 20000414 |
| | | | US 2000-578223 | 20000523 |

ED Entered STN: 03 Jul 2001

AB Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β -secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record os one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 358419-67-7 358419-74-6 358419-77-9
 358419-82-6 358419-84-8 358419-98-4
 358420-04-9 358420-17-4 358420-21-0
 358420-39-0 358420-62-9 358420-64-1
 358420-67-4 358420-70-9 358420-74-3
 358420-91-4 358421-05-3 358421-07-5
 358421-10-0 358421-13-3 358421-18-8
 358421-21-3 358421-50-8 358421-64-4
 358421-66-6 358421-72-4 358421-80-4
 358422-21-6 358422-35-2 358422-43-2
 358422-70-5 358422-75-0 358422-81-8 35842
 2-88-5 358422-94-3 358423-11-7
 358423-15-1 358423-20-8 358423-50-4
 358423-62-8 358423-98-0 358424-14-3
 358424-16-5 358424-38-1 358424-48-3
 358424-64-3 358424-68-7 358424-70-1
 358425-10-2 358425-18-0 358425-33-9
 358425-39-5 358425-79-3 358425-82-8
 358425-93-1 358426-14-9 358426-21-8

358426-31-0

RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); PRP (Properties); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
(NCH ribozyme specific for human BACE; nucleic acid-based ribozyme and
DNAzyme modulators of gene expression)

RN 358419-67-7 CAPLUS

CN RNA, (U-C-C-C-G-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-
G-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ucccgggccu gaugaggccg uuaggccgaa igcugcgg

RN 358419-74-6 CAPLUS

CN RNA, (G-G-C-U-G-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-
A-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ggcugcuccu gaugaggccg uuaggccgaa igccacca

RN 358419-77-9 CAPLUS

CN RNA, (G-G-C-U-G-C-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-
G-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 ggcugcgucu gaugaggccg uuaggccgaa igcugcuc

RN 358419-82-6 CAPLUS

CN RNA, (A-G-G-G-C-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-
C-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 agggcucccu gaugaggccg uuaggccgaa igcuccug

RN 358419-84-8 CAPLUS

CN RNA, (A-G-G-G-G-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-
C-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 aggggcaacu gaugaggccg uuaggccgaa igcuccgg

RN 358419-98-4 CAPLUS

CN RNA, (G-G-C-U-U-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-
C-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ggcucccccu gaugaggccg uuaggccgaa iguccccc

RN 358420-04-9 CAPLUS
CN RNA, (G-G-C-A-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-U-G) (9CI) (CA INDEX NAME)

SEQ 1 ggcauggccu gaugaggccg uuaggccgaa igccggug

RN 358420-17-4 CAPLUS
CN RNA, (U-C-C-C-G-G-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ucccggcgcu gaugaggccg uuaggccgaa igcuggga

RN 358420-21-0 CAPLUS
CN RNA, (G-C-G-G-G-C-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-C-G) (9CI) (CA INDEX NAME)

SEQ 1 gcggggcgccu gaugaggccg uuaggccgaa igcucccg

RN 358420-39-0 CAPLUS
CN RNA, (C-A-G-G-G-G-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 caggggagcu gaugaggccg uuaggccgaa igcuggga

RN 358420-62-9 CAPLUS
CN RNA, (C-C-G-G-G-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ccgggucccu gaugaggccg uuaggccgaa igcugugg

RN 358420-64-1 CAPLUS
CN RNA, (C-A-G-C-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cagccccccu gaugaggccg uuaggccgaa iguccggg

RN 358420-67-4 CAPLUS
CN RNA, (A-G-G-G-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-C) (9CI) (CA INDEX NAME)

SEQ 1 agggcccucu gaugaggccg uuaggccgaa igccagcc

RN 358420-70-9 CAPLUS
CN RNA, (G-G-C-C-U-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ggccugcacu gaugaggccg uuaggccgaa igcccugg

RN 358420-74-3 CAPLUS
CN RNA, (G-G-A-C-G-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ggacgccacu gaugaggccg uuaggccgaa igccugca

RN 358420-91-4 CAPLUS
CN RNA, (G-G-U-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 ggugcuggcu gaugaggccg uuaggccgaa igcuucuc

RN 358421-05-3 CAPLUS
CN RNA, (G-C-U-C-G-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-C-G) (9CI) (CA INDEX NAME)

SEQ 1 gcucgcaccu gaugaggccg uuaggccgaa igcccacg

RN 358421-07-5 CAPLUS
CN RNA, (G-G-C-C-C-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ggcccucucu gaugaggccg uuaggccgaa igcucgca

RN 358421-10-0 CAPLUS
CN RNA, (C-G-G-C-C-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-U-C-U) (9CI) (CA INDEX NAME)

SEQ 1 cggccuuccu gaugaggccg uuaggccgaa igcccucu

RN 358421-13-3 CAPLUS
CN RNA, (G-C-C-A-U-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gccauggucu gaugaggccg uuaggccgaa igccccgg

RN 358421-18-8 CAPLUS
CN RNA, (C-A-G-G-G-C-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 caggguucu gaugaggccg uuaggccgaa igccaugg

RN 358421-21-3 CAPLUS
CN RNA, (C-C-A-G-G-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ccagggcacu gaugaggccg uuaggccgaa igcuuggg

RN 358421-50-8 CAPLUS
CN RNA, (C-G-C-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 cgcccccccu gaugaggccg uuaggccgaa igccgcug

RN 358421-64-4 CAPLUS
CN RNA, (G-G-C-U-C-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 ggcuccuccu gaugaggccg uuaggccgaa igcucuuc

RN 358421-66-6 CAPLUS
CN RNA, (C-U-C-C-G-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 cuccggcccu gaugaggccg uuaggccgaa igcuccuc

RN 358421-72-4 CAPLUS
CN RNA, (U-G-C-C-C-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-U-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ugccccuccu gaugaggccg uuaggccgaa iguugucc

RN 358421-80-4 CAPLUS
CN RNA, (U-C-U-G-C-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ucugcgggcu gaugaggccg uuaggccgaa igcugccc

RN 358422-21-6 CAPLUS
CN RNA, (C-C-U-U-C-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ccuuccggcu gaugaggccg uuaggccgaa igucccg

RN 358422-35-2 CAPLUS
CN RNA, (U-G-C-U-U-A-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-G-G-U-G) (9CI) (CA INDEX NAME)

SEQ 1 ugcuuacccu gaugaggccg uuaggccgaa igucggug

RN 358422-43-2 CAPLUS
CN RNA, (U-G-A-C-G-U-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ugacguugcu gaugaggccg uuaggccgaa igccaugg

RN 358422-70-5 CAPLUS
CN RNA, (C-U-C-A-G-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-C) (9CI) (CA INDEX NAME)

SEQ 1 cucagcaucu gaugaggccg uuaggccgaa igccagcc

RN 358422-75-0 CAPLUS
CN RNA, (G-A-G-U-C-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-G-C) (9CI) (CA INDEX NAME)

SEQ 1 gagucguccu gaugaggccg uuaggccgaa igccuggc

RN 358422-81-8 CAPLUS
CN RNA, (U-C-A-A-A-G-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 ucaaagaacu gaugaggccg uuaggccgaa igcuccag

RN 358422-88-5 CAPLUS
CN RNA, (G-G-G-A-A-C-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-C-U) (9CI) (CA INDEX NAME)

SEQ 1 gggaacgucu gaugaggccg uuaggccgaa igucugcu

RN 358422-94-3 CAPLUS
CN RNA, (G-G-G-A-G-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 gggagaagcu gaugaggccg uuaggccgaa iguuggga

RN 358423-11-7 CAPLUS
CN RNA, (C-U-U-C-A-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cuucagaccu gaugaggccg uuaggccgaa iguugagg

RN 358423-15-1 CAPLUS
CN RNA, (U-C-C-G-A-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 uccgacagcu gaugaggccg uuaggccgaa igccagca

RN 358423-20-8 CAPLUS
CN RNA, (A-C-A-G-C-G-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-G-A-U-A) (9CI) (CA INDEX NAME)

SEQ 1 acagcgagcu gaugaggccg uuaggccgaa igucgaua

RN 358423-50-4 CAPLUS
CN RNA, (G-C-A-A-A-C-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-U-G) (9CI) (CA INDEX NAME)

SEQ 1 gcaaacgacu gaugaggccg uuaggccgaa iguuggug

RN 358423-62-8 CAPLUS
CN RNA, (C-G-U-G-G-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-C-U) (9CI) (CA INDEX NAME)

SEQ 1 cguggaggcu gaugaggccg uuaggccgaa igcugccu

RN 358423-98-0 CAPLUS
CN RNA, (G-G-A-A-G-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-U-A) (9CI) (CA INDEX NAME)

SEQ 1 ggaaggaccu gaugaggccg uuaggccgaa iguuggua

RN 358424-14-3 CAPLUS
CN RNA, (U-C-U-U-C-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 ucuuccaccu gaugaggccg uuaggccgaa igccgcag

RN 358424-16-5 CAPLUS
CN RNA, (U-U-G-G-G-A-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-C-A-U) (9CI) (CA INDEX NAME)

SEQ 1 uugggacgcu gaugaggccg uuaggccgaa igccacau

RN 358424-38-1 CAPLUS
CN RNA, (U-C-G-U-U-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-G-A-U) (9CI) (CA INDEX NAME)

SEQ 1 ucguuuuccu gaugaggccg uuaggccgaa igcccgau

RN 358424-48-3 CAPLUS
CN RNA, (U-G-A-C-A-A-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-U-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ugacaaaaacu gaugaggccg uuaggccgaa igccuucc

RN 358424-64-3 CAPLUS
CN RNA, (G-G-U-C-A-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-A-C-U) (9CI) (CA INDEX NAME)

SEQ 1 ggucaugacu gaugaggccg uuaggccgaa iguugacu

RN 358424-68-7 CAPLUS
CN RNA, (A-U-A-G-G-C-U-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 auagguacu gaugaggccg uuaggccgaa igucauga

RN 358424-70-1 CAPLUS
CN RNA, (C-A-U-G-A-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-A-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 caugacaucau gaugaggccg uuaggccgaa igcuaugg

RN 358425-10-2 CAPLUS
CN RNA, (C-U-G-C-C-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-C-U) (9CI) (CA INDEX NAME)

SEQ 1 cugcccaucu gaugaggccg uuaggccgaa igccuccu

RN 358425-18-0 CAPLUS
CN RNA, (C-G-G-A-G-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cggaggugcu gaugaggccg uuaggccgaa iguccagg

RN 358425-33-9 CAPLUS
CN RNA, (A-G-G-U-G-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 agguguccu gaugaggccg uuaggccgaa igccacag

RN 358425-39-5 CAPLUS
CN RNA, (G-G-U-G-G-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 gguggggacu gaugaggccg uuaggccgaa iguccuga

RN 358425-79-3 CAPLUS
CN RNA, (A-A-G-G-U-U-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-A-A-G) (9CI) (CA INDEX NAME)

SEQ 1 aagguucacu gaugaggccg uuaggccgaa igcugaag

RN 358425-82-8 CAPLUS
CN RNA, (G-U-G-G-A-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 guggacaacu gaugaggccg uuaggccgaa iguucagg

RN 358425-93-1 CAPLUS
CN RNA, (A-A-U-A-C-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-A-G) (9CI) (CA INDEX NAME)

SEQ 1 aaacuucuuu gaugaggccg uuaggccgaa iguuggag

RN 358426-14-9 CAPLUS
CN RNA, (C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 cugaugaggc cguuaggccg aaigucucuu

RN 358426-21-8 CAPLUS
CN RNA, (A-C-U-G-A-C-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 acugacuucu gaugaggccg uuaggccgaa igccagca

RN 358426-31-0 CAPLUS
CN RNA, (C-C-A-A-U-G-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-G-U-U) (9CI) (CA INDEX NAME)

SEQ 1 ccaauguucu gaugaggccg uuaggccgaa igcuuguu

L47 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:400023 CAPLUS
Correction of: 2001:294219
DOCUMENT NUMBER: 135:16022
Correction of: 134:337614
TITLE: Nucleic acid-based ribozyme and DNzyme modulators of
gene expression
INVENTOR(S): McSwiggen, James; Usman, Nassim; Blatt, Lawrence;
Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander;
Matulic-adamic, Jasenka; Sweedler, David; Draper,
Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry,

Amber; Zinnen, Shawn; Lugwig, Janos; Sproat, Brian S.
 PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 717 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001016312 A2 | | 20010308 | WO 2000-US23998 | 20000830 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-PV151713 | 19990831 |
| | | | US 1999-406643 | 19990927 |
| | | | US 1999-PV156467 | 19990927 |
| | | | US 1999-PV156236 | 19990927 |
| | | | US 1999-436430 | 19991108 |
| | | | US 1999-PV169100 | 19991206 |
| | | | US 1999-PV173612 | 19991229 |
| | | | US 1999-474432 | 19991229 |
| | | | US 1999-476387 | 19991230 |
| | | | US 2000-498824 | 20000204 |
| | | | US 2000-531025 | 20000320 |
| | | | US 2000-PV197769 | 20000414 |
| | | | US 2000-578223 | 20000523 |

ED Entered STN: 05 Jun 2001

AB Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β -secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record os one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 341558-79-0 341558-82-5 341558-86-9
 341558-97-2 341559-00-0 341559-06-6
 341559-09-9 341559-18-0 341559-22-6
 341559-31-7 341559-61-3 341559-69-1
 341560-10-9 341560-18-7 341560-32-5
 341560-50-7 341560-90-5 341561-08-8
 341561-18-0 341561-57-7 341561-79-3
 341561-94-2 341561-97-5 341562-06-9
 341562-14-9 341562-25-2 341562-91-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)
(NCH ribozyme specific for human methionine aminopeptidase type 2;
nucleic acid-based ribozyme and DNAzyme modulators of gene expression)

RN 341558-79-0 CAPLUS
CN RNA, (G-C-U-C-C-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-U-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341558-82-5 CAPLUS
CN RNA, (C-A-U-U-C-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-C-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341558-86-9 CAPLUS
CN RNA, (C-U-G-G-A-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-G-C-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341558-97-2 CAPLUS
CN RNA, (U-U-U-U-U-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-00-0 CAPLUS
CN RNA, (G-C-U-G-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-U-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-06-6 CAPLUS
CN RNA, (U-C-U-U-U-A-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-09-9 CAPLUS
CN RNA, (A-U-C-C-A-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-U-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-18-0 CAPLUS
CN RNA, (U-G-A-A-C-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-22-6 CAPLUS
CN RNA, (C-U-G-A-G-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-31-7 CAPLUS
CN RNA, (U-A-G-G-A-U-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-C-A-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-61-3 CAPLUS
CN RNA, (G-U-C-A-U-C-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-G-A-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341559-69-1 CAPLUS
CN RNA, (G-A-A-A-U-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-

U-G-C-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341560-10-9 CAPLUS

CN RNA, (U-U-C-U-U-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341560-18-7 CAPLUS

CN RNA, (U-U-A-C-G-G-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-C-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341560-32-5 CAPLUS

CN RNA, (A-C-U-A-C-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-C-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341560-50-7 CAPLUS

CN RNA, (G-A-A-G-G-C-A-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-C-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341560-90-5 CAPLUS

CN RNA, (U-G-U-U-G-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-U-G-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-08-8 CAPLUS

CN RNA, (U-A-U-U-A-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-A-C-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-18-0 CAPLUS

CN RNA, (U-U-U-U-U-C-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-A-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-57-7 CAPLUS

CN RNA, (U-U-C-C-A-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-A-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-79-3 CAPLUS

CN RNA, (C-A-A-A-U-A-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-G-A-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-94-2 CAPLUS

CN RNA, (U-U-A-U-A-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-A-G) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341561-97-5 CAPLUS

CN RNA, (U-U-C-U-A-G-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-U-A-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341562-06-9 CAPLUS

CN RNA, (U-A-G-U-U-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-

U-U-G-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341562-14-9 CAPLUS

CN RNA, (U-C-A-G-G-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-U-U-C) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341562-25-2 CAPLUS

CN RNA, (G-U-U-C-U-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-U-A-A) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 341562-91-2 CAPLUS

CN RNA, (U-C-U-G-A-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-A-U-U) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 342825-90-5 342825-93-8 342825-96-1

342826-16-8 342826-23-7 342826-27-1

342826-34-0 342826-39-5 342826-70-4

342826-76-0 342826-81-7 342826-83-9

342826-89-5 342827-41-2 342827-43-4

342827-51-4 342827-55-8 342827-57-0

342827-66-1 342827-70-7 342827-82-1

342827-96-7 342828-10-8 342828-13-1

342828-38-0 342828-47-1 342828-62-0

342828-76-6 342828-88-0 342828-91-5

342828-96-0 342829-02-1 342829-24-7

342829-31-6 342829-58-7 342829-64-5

342829-70-3 342829-85-0 342829-91-8

342830-02-8 342830-35-7 342830-47-1

342830-60-8 342830-83-5 342830-85-7

342831-01-0 342831-07-6 342831-25-8

342831-33-8 342831-38-3 342831-44-1

342831-47-4 342831-72-5 342831-88-3

342831-91-8 342831-98-5 342832-10-4

342832-12-6 342832-24-0 342832-27-3

342832-64-8 342832-85-3 342832-90-0

342833-04-9 342833-11-8 342833-14-1

342833-20-9 342833-26-5 342833-37-8

342833-42-5 342833-61-8 342833-66-3

342833-94-7 342834-05-3 342834-17-7

342834-21-3 342834-25-7 342834-61-1

342834-76-8 342834-78-0 342834-88-2

342834-93-9 342835-01-2 342835-09-0

342835-19-2 342835-26-1 342835-32-9

342835-35-2 342835-43-2 342835-47-6

342835-74-9 342835-82-9 342836-27-5

342836-30-0 342836-35-5 342836-42-4

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); PRP (Properties); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)

(NCH ribozyme specific for human telomerase reverse transcriptase;

nucleic acid-based ribozyme and DNAzyme modulators of gene expression)

RN 342825-90-5 CAPLUS

CN RNA, (C-G-G-G-G-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 cggggccacu gaugaggccg uuaggccgaa igcuuccc

RN 342825-93-8 CAPLUS

CN RNA, (G-G-U-G-G-C-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gguggccgcu gaugaggccg uuaggccgaa igccaggg

RN 342825-96-1 CAPLUS

CN RNA, (C-G-C-G-G-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cgcgggggcu gaugaggccg uuaggccgaa igccgggg

RN 342826-16-8 CAPLUS

CN RNA, (C-G-C-G-G-U-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-G-C) (9CI) (CA INDEX NAME)

SEQ 1 cgcgguagcu gaugaggccg uuaggccgaa igcugcgc

RN 342826-23-7 CAPLUS

CN RNA, (C-A-C-G-A-A-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-G) (9CI) (CA INDEX NAME)

SEQ 1 cacgaacgcu gaugaggccg uuaggccgaa igccagcg

RN 342826-27-1 CAPLUS

CN RNA, (C-A-G-C-C-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 cagcccugcu gaugaggccg uuaggccgaa igccccag

RN 342826-34-0 CAPLUS

CN RNA, (A-A-G-C-C-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-C-C-G) (9CI) (CA INDEX NAME)

SEQ 1 aagccgcccu gaugaggccg uuaggccgaa iguccccg

RN 342826-39-5 CAPLUS

CN RNA, (C-A-G-G-C-A-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-

A-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 caggcacucu gaugaggccg uuaggccgaa igccacca

RN 342826-70-4 CAPLUS
CN RNA, (C-A-G-C-A-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 cagcacuccu gaugaggccg uuaggccgaa igccacca

RN 342826-76-0 CAPLUS
CN RNA, (G-A-A-G-C-C-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 gaagccgacu gaugaggccg uuaggccgaa igccagca

RN 342826-81-7 CAPLUS
CN RNA, (G-C-C-C-C-C-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-C-G-U) (9CI) (CA INDEX NAME)

SEQ 1 gcccccgccu gaugaggccg uuaggccgaa igccccgu

RN 342826-83-9 CAPLUS
CN RNA, (C-C-U-C-G-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-C-C-G) (9CI) (CA INDEX NAME)

SEQ 1 ccucggggccu gaugaggccg uuaggccgaa igcccccg

RN 342826-89-5 CAPLUS
CN RNA, (G-G-U-G-G-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gguggugacu gaugaggccg uuaggccgaa igccucgg

RN 342827-41-2 CAPLUS
CN RNA, (C-G-G-G-G-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-A-G) (9CI) (CA INDEX NAME)

SEQ 1 cgggggcccu gaugaggccg uuaggccgaa igccugag

RN 342827-43-4 CAPLUS
CN RNA, (U-G-U-G-G-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-G-C) (9CI) (CA INDEX NAME)

SEQ 1 uguggcgccu gaugaggccg uuaggccgaa igccgggc

RN 342827-51-4 CAPLUS
CN RNA, (C-G-C-C-U-U-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-A-C-U) (9CI) (CA INDEX NAME)

SEQ 1 cgccuucgcu gaugaggccg uuaggccgaa iguccacu

RN 342827-55-8 CAPLUS
CN RNA, (A-U-G-G-U-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-G-U-U) (9CI) (CA INDEX NAME)

SEQ 1 augguucccu gaugaggccg uuaggccgaa igcccguu

RN 342827-57-0 CAPLUS
CN RNA, (U-G-A-C-G-C-U-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 ugacgcuacu gaugaggccg uuaggccgaa iguuccag

RN 342827-66-1 CAPLUS
CN RNA, (G-G-G-C-U-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gggcuggccu gaugaggccg uuaggccgaa igcccagg

RN 342827-70-7 CAPLUS
CN RNA, (C-G-C-A-C-C-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 cgcacccgcu gaugaggccg uuaggccgaa igcuggca

RN 342827-82-1 CAPLUS
CN RNA, (C-C-A-C-G-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 ccacgccucu gaugaggccg uuaggccgaa igccucuu

RN 342827-96-7 CAPLUS

CN RNA, (G-C-C-C-G-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gcccgggucu gaugaggccg uuaggccgaa igcccagg

RN 342828-10-8 CAPLUS

CN RNA, (U-C-U-U-C-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-G-C) (9CI) (CA INDEX NAME)

SEQ 1 ucuucggccu gaugaggccg uuaggccgaa igucuggc

RN 342828-13-1 CAPLUS

CN RNA, (C-A-A-A-G-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 caaagaggcu gaugaggccg uuaggccgaa igcuucuu

RN 342828-38-0 CAPLUS

CN RNA, (U-G-G-A-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-G-C-G) (9CI) (CA INDEX NAME)

SEQ 1 uggaugggcu gaugaggccg uuaggccgaa igcccgcg

RN 342828-47-1 CAPLUS

CN RNA, (G-G-A-C-G-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ggacguggcu gaugaggccg uuaggccgaa igccgcga

RN 342828-62-0 CAPLUS

CN RNA, (G-A-A-G-U-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 gaagugcucu gaugaggccg uuaggccgaa igucucgg

RN 342828-76-6 CAPLUS

CN RNA, (A-G-G-A-A-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-

G-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 aggaaggacu gaugaggccg uuaggccgaa igccgcag

RN 342828-88-0 CAPLUS

CN RNA, (G-U-C-A-G-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 gucaggcucu gaugaggccg uuaggccgaa igccucag

RN 342828-91-5 CAPLUS

CN RNA, (C-G-C-C-A-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-C) (9CI) (CA INDEX NAME)

SEQ 1 cgccaguccu gaugaggccg uuaggccgaa igcugggc

RN 342828-96-0 CAPLUS

CN RNA, (C-A-G-A-A-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 cagaaagacu gaugaggccg uuaggccgaa igucucca

RN 342829-02-1 CAPLUS

CN RNA, (G-G-C-A-U-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ggcauccacu gaugaggccg uuaggccgaa igccugga

RN 342829-24-7 CAPLUS

CN RNA, (A-G-A-A-A-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-A-U) (9CI) (CA INDEX NAME)

SEQ 1 agaaacagcu gaugaggccg uuaggccgaa igccgcgau

RN 342829-31-6 CAPLUS

CN RNA, (A-C-U-G-C-G-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 acugcgcgcu gaugaggccg uuaggccgaa iguuccca

RN 342829-58-7 CAPLUS
CN RNA, (G-A-G-C-C-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 gagcccugcu gaugaggccg uuaggccgaa igcuucuc

RN 342829-64-5 CAPLUS
CN RNA, (C-U-C-C-U-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 cuccucggcu gaugaggccg uuaggccgaa igccgcca

RN 342829-70-3 CAPLUS
CN RNA, (G-G-C-G-A-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-U-G) (9CI) (CA INDEX NAME)

SEQ 1 ggcgacggcu gaugaggccg uuaggccgaa igucugug

RN 342829-85-0 CAPLUS
CN RNA, (C-C-U-G-C-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 ccugccagcu gaugaggccg uuaggccgaa igcugcug

RN 342829-91-8 CAPLUS
CN RNA, (G-C-G-C-A-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 gcgcaggccu gaugaggccg uuaggccgaa igcccgca

RN 342830-02-8 CAPLUS
CN RNA, (A-G-C-C-C-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 agccccagcu gaugaggccg uuaggccgaa igccuggg

RN 342830-35-7 CAPLUS
CN RNA, (C-A-A-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 caaccccucu gaugaggccg uuaggccgaa igcuccug

RN 342830-47-1 CAPLUS

CN RNA, (C-A-G-G-A-A-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-G-G-A) (9CI) (CA INDEX NAME)

SEQ 1 caggaacucu gaugaggccg uuaggccgaa igccagga

RN 342830-60-8 CAPLUS

CN RNA, (U-U-G-A-A-A-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-C-G) (9CI) (CA INDEX NAME)

SEQ 1 uugaaacgcu gaugaggccg uuaggccgaa igucuccg

RN 342830-83-5 CAPLUS

CN RNA, (G-G-C-G-G-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ggcggggcccu gaugaggccg uuaggccgaa igcuuccc

RN 342830-85-7 CAPLUS

CN RNA, (A-G-C-A-G-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-G-C) (9CI) (CA INDEX NAME)

SEQ 1 agcagggccu gaugaggccg uuaggccgaa igccuggc

RN 342831-01-0 CAPLUS

CN RNA, (A-G-C-C-C-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 agcccguccu gaugaggccg uuaggccgaa igcuuggg

RN 342831-07-6 CAPLUS

CN RNA, (G-A-A-C-G-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 gaacguuccu gaugaggccg uuaggccgaa igcuccca

RN 342831-25-8 CAPLUS

CN RNA, (C-G-C-C-C-A-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-

G-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cgcccaggcu gaugaggccg uuaggccgaa igccgggg

RN 342831-33-8 CAPLUS

CN RNA, (U-A-U-C-G-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-G-C) (9CI) (CA INDEX NAME)

SEQ 1 uaucgucccu gaugaggccg uuaggccgaa igcccagc

RN 342831-38-3 CAPLUS

CN RNA, (G-G-U-G-C-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-U-G-U) (9CI) (CA INDEX NAME)

SEQ 1 ggugcgcccu gaugaggccg uuaggccgaa igcccugu

RN 342831-44-1 CAPLUS

CN RNA, (C-G-G-G-U-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 cggguccucu gaugaggccg uuaggccgaa igcccgca

RN 342831-47-4 CAPLUS

CN RNA, (C-A-G-G-C-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 caggcgcccu gaugaggccg uuaggccgaa iguccugg

RN 342831-72-5 CAPLUS

CN RNA, (G-U-G-U-U-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-G-A-U) (9CI) (CA INDEX NAME)

SEQ 1 guguucugcu gaugaggccg uuaggccgaa iguuugau

RN 342831-88-3 CAPLUS

CN RNA, (G-C-U-C-U-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-U-G-C) (9CI) (CA INDEX NAME)

SEQ 1 gcucuugacu gaugaggccg uuaggccgaa igccuugc

RN 342831-91-8 CAPLUS
CN RNA, (U-A-G-A-G-A-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-U-U-G) (9CI) (CA INDEX NAME)

SEQ 1 uagagacgcu gaugaggccg uuaggccgaa igcucuug

RN 342831-98-5 CAPLUS
CN RNA, (A-C-G-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-G-U-C) (9CI) (CA INDEX NAME)

SEQ 1 acggcuggcu gaugaggccg uuaggccgaa igucuguc

RN 342832-10-4 CAPLUS
CN RNA, (C-A-G-C-G-G-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-C-U) (9CI) (CA INDEX NAME)

SEQ 1 cagcgggccu gaugaggccg uuaggccgaa igucuccu

RN 342832-12-6 CAPLUS
CN RNA, (C-C-C-U-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-U-C) (9CI) (CA INDEX NAME)

SEQ 1 cccucagccu gaugaggccg uuaggccgaa igcugguc

RN 342832-24-0 CAPLUS
CN RNA, (G-C-C-A-C-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-U) (9CI) (CA INDEX NAME)

SEQ 1 gccacugccu gaugaggccg uuaggccgaa igccucau

RN 342832-27-3 CAPLUS
CN RNA, (C-G-U-C-G-A-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 cgucgaagcu gaugaggccg uuaggccgaa igccacug

RN 342832-64-8 CAPLUS
CN RNA, (C-G-U-A-G-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 cguagcaccu gaugaggccg uuaggccgaa igcugcag

RN 342832-85-3 CAPLUS

CN RNA, (C-C-U-G-A-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-U-C-G) (9CI) (CA INDEX NAME)

SEQ 1 ccugaggacu gaugaggccg uuaggccgaa iguuuucg

RN 342832-90-0 CAPLUS

CN RNA, (U-C-G-G-A-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ucggaccacu gaugaggccg uuaggccgaa iguccuga

RN 342833-04-9 CAPLUS

CN RNA, (G-C-C-A-C-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-G-U) (9CI) (CA INDEX NAME)

SEQ 1 gccacccacu gaugaggccg uuaggccgaa igccucgu

RN 342833-11-8 CAPLUS

CN RNA, (U-A-G-G-C-C-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 uaggccgucu gaugaggccg uuaggccgaa igccggca

RN 342833-14-1 CAPLUS

CN RNA, (A-G-G-G-G-A-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 aggggaaucu gaugaggccg uuaggccgaa igccgugg

RN 342833-20-9 CAPLUS

CN RNA, (C-C-A-G-C-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-A-C) (9CI) (CA INDEX NAME)

SEQ 1 ccagcagccu gaugaggccg uuaggccgaa igccgcac

RN 342833-26-5 CAPLUS

CN RNA, (C-A-C-C-U-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-

C-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 caccuccacu gaugaggccg uuaggccgaa iguccggg

RN 342833-37-8 CAPLUS

CN RNA, (U-C-U-G-A-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ucugauggcu gaugaggccg uuaggccgaa iguccggg

RN 342833-42-5 CAPLUS

CN RNA, (G-G-U-G-A-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ggugagaccu gaugaggccg uuaggccgaa igcucuga

RN 342833-61-8 CAPLUS

CN RNA, (C-C-A-G-A-A-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 ccagaaaccu gaugaggccg uuaggccgaa igcuguga

RN 342833-66-3 CAPLUS

CN RNA, (C-C-G-U-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 ccgucuggcu gaugaggccg uuaggccgaa igcuguuc

RN 342833-94-7 CAPLUS

CN RNA, (A-A-A-A-U-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 aaaaugugcu gaugaggccg uuaggccgaa iguucuuc

RN 342834-05-3 CAPLUS

CN RNA, (G-C-A-G-A-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-U-G-U) (9CI) (CA INDEX NAME)

SEQ 1 gcagagggcu gaugaggccg uuaggccgaa igccgugu

RN 342834-17-7 CAPLUS
CN RNA, (U-G-C-G-U-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-U-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ugcguucucu gaugaggccg uuaggccgaa igcuuuca

RN 342834-21-3 CAPLUS
CN RNA, (G-G-C-G-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ggcgcccucu gaugaggccg uuaggccgaa igccccc

RN 342834-25-7 CAPLUS
CN RNA, (A-G-G-G-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-C-G) (9CI) (CA INDEX NAME)

SEQ 1 agggcagacu gaugaggccg uuaggccgaa igccggcg

RN 342834-61-1 CAPLUS
CN RNA, (C-U-G-C-G-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-C-C) (9CI) (CA INDEX NAME)

SEQ 1 cugcgucucu gaugaggccg uuaggccgaa igcugucc

RN 342834-76-8 CAPLUS
CN RNA, (U-G-C-C-G-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ugccgggucu gaugaggccg uuaggccgaa igcugcgg

RN 342834-78-0 CAPLUS
CN RNA, (G-C-A-G-U-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-G-C-U) (9CI) (CA INDEX NAME)

SEQ 1 gcagugcccu gaugaggccg uuaggccgaa iguuggcu

RN 342834-88-2 CAPLUS
CN RNA, (G-U-C-C-A-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 guccaggacu gaugaggccg uuaggccgaa igucuuga

RN 342834-93-9 CAPLUS

CN RNA, (U-G-G-G-C-G-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-U-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ugggcgggcu gaugaggccg uuaggccgaa igccauca

RN 342835-01-2 CAPLUS

CN RNA, (U-C-U-C-G-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ucucggcccu gaugaggccg uuaggccgaa igcugugg

RN 342835-09-0 CAPLUS

CN RNA, (G-C-G-U-G-A-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 gcgugacacu gaugaggccg uuaggccgaa igcugcug

RN 342835-19-2 CAPLUS

CN RNA, (C-U-G-G-G-U-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 cugggugucu gaugaggccg uuaggccgaa igccgccc

RN 342835-26-1 CAPLUS

CN RNA, (A-G-C-G-G-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 agcggugccu gaugaggccg uuaggccgaa igccuggg

RN 342835-32-9 CAPLUS

CN RNA, (A-C-U-C-A-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 acucacuccu gaugaggccg uuaggccgaa igccucag

RN 342835-35-2 CAPLUS

CN RNA, (G-G-A-C-A-U-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-

U-C-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ggacaugccu gaugaggccg uuaggccgaa igccucgg

RN 342835-43-2 CAPLUS

CN RNA, (A-C-U-C-G-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 acucgcuccu gaugaggccg uuaggccgaa igccucag

RN 342835-47-6 CAPLUS

CN RNA, (U-C-A-G-C-C-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-A-C) (9CI) (CA INDEX NAME)

SEQ 1 ucagcccucu gaugaggccg uuaggccgaa igcuggac

RN 342835-74-9 CAPLUS

CN RNA, (G-G-A-A-A-A-G-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ggaaaagccu gaugaggccg uuaggccgaa igcccugg

RN 342835-82-9 CAPLUS

CN RNA, (U-G-G-A-A-G-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-C-C-U-G) (9CI) (CA INDEX NAME)

SEQ 1 uggaagcccu gaugaggccg uuaggccgaa igcuccug

RN 342836-27-5 CAPLUS

CN RNA, (C-C-U-U-C-U-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ccuucucacu gaugaggccg uuaggccgaa igucucca

RN 342836-30-0 CAPLUS

CN RNA, (A-G-C-U-C-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 agcucccacu gaugaggccg uuaggccgaa iguccuuc

RN 342836-35-5 CAPLUS
 CN RNA, (C-A-C-A-C-C-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-C-U-C) (9CI) (CA INDEX NAME)

SEQ 1 cacaccuucu gaugaggccg uuaggccgaa igucacuc

RN 342836-42-4 CAPLUS
 CN RNA, (C-A-G-G-U-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-C-G) (9CI) (CA INDEX NAME)

SEQ 1 caggugcacu gaugaggccg uuaggccgaa iguccucg

L47 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:294219 CAPLUS
 Correction of: 2001:168136
 DOCUMENT NUMBER: 134:337614
 Correction of: 134:233606
 TITLE: Nucleic acid-based ribozyme and DNzyme modulators of gene expression
 INVENTOR(S): McSwiggen, James; Usman, Nassim; Blatt, Lawrence; Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander; Matulic-adamic, Jasenka; Sweedler, David; Draper, Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry, Amber; Zinnen, Shawn; Ludwig, Janos; Sproat, Brian S.
 PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 717 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 PATENT INFORMATION: .

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001016312 A2 | | 20010308 | WO 2000-US23998 | 20000830 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ | | | | |
| RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-PV151713 | 19990831 |
| | | | US 1999-406643 | 19990927 |
| | | | US 1999-PV156467 | 19990927 |
| | | | US 1999-PV156236 | 19990927 |
| | | | US 1999-436430 | 19991108 |
| | | | US 1999-PV169100 | 19991206 |
| | | | US 1999-PV173612 | 19991229 |
| | | | US 1999-474432 | 19991229 |
| | | | US 1999-476387 | 19991230 |
| | | | US 2000-498824 | 20000204 |
| | | | US 2000-531025 | 20000320 |
| | | | US 2000-PV197769 | 20000414 |

US 2000-578223

20000523

ED Entered STN: 26 Apr 2001

AB Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β -secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record os one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT 335673-81-9 335673-92-2 335673-99-9
335674-05-0 335674-11-8 335674-25-4
335674-33-4 335674-41-4 335674-59-4
335674-73-2 335674-76-5 335674-88-9
335674-97-0 335675-11-1 335675-14-4
335675-23-5 335675-37-1 335675-50-8
335675-74-6 335675-76-8 335675-95-1
335676-02-3 335676-14-7 335676-23-8
335676-48-7 335676-55-6 335676-60-3
335676-86-3 335676-88-5 335677-15-1
335677-28-6 335677-34-4 335677-63-9
335677-69-5 335677-97-9 335678-27-8
335678-30-3 335678-44-9 335678-48-3
335679-00-0 335679-05-5 335679-12-4
335679-38-4 335679-42-0 335679-58-8
335679-92-0 335680-17-6 335680-27-8
335680-32-5 335680-60-9 335680-64-3
335680-78-9 335681-11-3 335681-42-0
335681-71-5 335681-81-7 335681-83-9

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NCH ribozyme specific for protein tyrosine phosphatase PTP-1B; nucleic acid-based ribozyme and DNAzyme modulators of gene expression)

RN 335673-81-9 CAPLUS

CN RNA, (G-C-C-G-C-U-C-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-G-C-G-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335673-92-2 CAPLUS

CN RNA, (U-C-C-A-U-G-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-A-G-G-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335673-99-9 CAPLUS

CN RNA, (C-U-G-G-U-A-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-G-C-C-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-05-0 CAPLUS

CN RNA, (G-A-A-G-U-C-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-A-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-11-8 CAPLUS

CN RNA, (A-G-G-A-A-G-C-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-A-C-U-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-25-4 CAPLUS

CN RNA, (U-C-C-G-A-C-U-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-A-A-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-33-4 CAPLUS

CN RNA, (A-C-U-C-C-U-U-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-U-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-41-4 CAPLUS

CN RNA, (U-A-G-G-C-A-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-U-G-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-59-4 CAPLUS

CN RNA, (U-C-U-U-U-U-U-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-A-G-U-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-73-2 CAPLUS

CN RNA, (G-G-G-U-U-G-U-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-U-U-C-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-76-5 CAPLUS

CN RNA, (A-G-U-U-U-C-U-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-G-U-A-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-88-9 CAPLUS

CN RNA, (C-C-A-A-A-G-U-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-A-U-G-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335674-97-0 CAPLUS

CN RNA, (C-A-A-G-A-A-U-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-G-U-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-11-1 CAPLUS

CN RNA, (C-G-U-G-C-U-C-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-A-G-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-14-4 CAPLUS

CN RNA, (A-C-C-A-C-A-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-G-U-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-23-5 CAPLUS

CN RNA, (C-A-G-A-C-A-G-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-C-C-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-37-1 CAPLUS

CN RNA, (C-G-G-A-A-G-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-U-U-U-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-50-8 CAPLUS

CN RNA, (A-G-C-G-C-A-G-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-G-G-C-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-74-6 CAPLUS

CN RNA, (G-G-G-G-C-U-C-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-C-U-C-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-76-8 CAPLUS

CN RNA, (U-C-G-G-G-U-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-C-C-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335675-95-1 CAPLUS

CN RNA, (C-G-U-U-U-G-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-G-G-G-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-02-3 CAPLUS

CN RNA, (C-C-A-U-U-G-U-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-C-C-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-14-7 CAPLUS

CN RNA, (A-U-C-C-U-C-C-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-U-C-U-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-23-8 CAPLUS

CN RNA, (C-A-U-U-U-A-A-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-C-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-48-7 CAPLUS

CN RNA, (C-U-C-C-C-C-U-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-G-G-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-55-6 CAPLUS

CN RNA, (U-C-A-G-U-G-C-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-C-U-C-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-60-3 CAPLUS

CN RNA, (A-C-C-A-G-G-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-C-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-86-3 CAPLUS

CN RNA, (G-G-A-G-G-G-U-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-A-U-G-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335676-88-5 CAPLUS

CN RNA, (G-U-G-G-A-G-G-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-A-G-G-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-15-1 CAPLUS

CN RNA, (U-C-G-G-G-C-G-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-C-U-G-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-28-6 CAPLUS

CN RNA, (U-C-C-G-U-C-C-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-G-G-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-34-4 CAPLUS

CN RNA, (G-G-G-A-A-G-A-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-U-U-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-63-9 CAPLUS

CN RNA, (U-C-A-A-A-A-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-G-U-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-69-5 CAPLUS

CN RNA, (A-C-G-G-G-U-G-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-C-U-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335677-97-9 CAPLUS

CN RNA, (C-A-A-G-G-G-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-U-C-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335678-27-8 CAPLUS

CN RNA, (U-A-C-A-U-U-A-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-C-A-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335678-30-3 CAPLUS

CN RNA, (U-U-G-A-U-G-C-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-A-C-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335678-44-9 CAPLUS

CN RNA, (G-A-C-G-C-A-G-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-A-U-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335678-48-3 CAPLUS

CN RNA, (C-C-C-A-G-U-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-U-G-A-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-00-0 CAPLUS

CN RNA, (G-C-A-C-A-G-G-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-G-G-A-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-05-5 CAPLUS

CN RNA, (U-A-A-U-G-A-U-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-A-U-G-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-12-4 CAPLUS

CN RNA, (U-C-A-G-C-A-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-A-G-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-38-4 CAPLUS

CN RNA, (G-A-C-A-G-G-C-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-U-C-A-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-42-0 CAPLUS

CN RNA, (A-C-C-A-G-G-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-G-G-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-58-8 CAPLUS

CN RNA, (U-G-U-G-A-A-U-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-C-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335679-92-0 CAPLUS

CN RNA, (A-A-U-G-G-C-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-A-U-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-17-6 CAPLUS

CN RNA, (A-A-G-A-A-G-U-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-U-C-C-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-27-8 CAPLUS

CN RNA, (C-G-U-C-A-C-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-U-U-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-32-5 CAPLUS

CN RNA, (A-C-G-G-C-G-G-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-G-C-C-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-60-9 CAPLUS

CN RNA, (G-C-C-C-C-A-C-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-U-G-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-64-3 CAPLUS

CN RNA, (G-C-A-C-C-A-U-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-C-C-A-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335680-78-9 CAPLUS

CN RNA, (U-A-A-U-G-U-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-C-U-U-C-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335681-11-3 CAPLUS

CN RNA, (C-U-C-U-G-U-A-C-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-C-U-A) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335681-42-0 CAPLUS

CN RNA, (A-G-G-A-U-A-G-G-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-A-A-A-C) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335681-71-5 CAPLUS

CN RNA, (G-U-A-A-A-U-A-U-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-U-U-A-A-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335681-81-7 CAPLUS

CN RNA, (U-U-A-U-U-C-C-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-C-C-A-U-U-G) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 335681-83-9 CAPLUS

CN RNA, (U-G-U-A-A-A-A-C-U-G-A-U-G-A-G-N-C-G-A-A-I-G-U-U-U-A-U-U) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 337387-33-4 337387-44-7 337387-54-9
337387-62-9 337387-69-6 337387-92-5
337387-96-9 337388-08-6 337388-37-1
337388-72-4 337388-74-6 337388-88-2
337389-08-9 337389-12-5 337389-24-9
337389-27-2 337389-41-0 337389-46-5
337389-71-6 337389-76-1 337389-95-4
337390-03-1 337390-26-8 337390-28-0
337390-43-9 337390-50-8 337390-73-5
337390-79-1 337390-83-7 337390-95-1
337391-00-1 337391-11-4 337391-23-8
337391-28-3 337391-53-4 337391-58-9
337391-67-0 337391-70-5 337391-76-1
337391-88-5

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)

(human protein kinase C α NCH ribozyme; nucleic acid-based
ribozyme and DNzyme modulators of gene expression)

RN 337387-33-4 CAPLUS

CN RNA, (G-U-C-A-G-C-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-
C-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 gucagccacu gaugaggccg uuaggccgaa iguccccc

RN 337387-44-7 CAPLUS

CN RNA, (G-A-A-G-C-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-
A-C-G-U) (9CI) (CA INDEX NAME)

SEQ 1 gaagcggucu gaugaggccg uuaggccgaa igccacgu

RN 337387-54-9 CAPLUS

CN RNA, (U-G-A-A-U-U-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 ugaauuugcu gaugaggccg uuaggccgaa iguccuuc

RN 337387-62-9 CAPLUS

CN RNA, (C-A-G-A-A-G-G-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 cagaaggucu gaugaggccg uuaggccgaa igcugcuu

RN 337387-69-6 CAPLUS

CN RNA, (C-G-G-U-G-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-A-G) (9CI) (CA INDEX NAME)

SEQ 1 cggugcagcu gaugaggccg uuaggccgaa igcugcag

RN 337387-92-5 CAPLUS

CN RNA, (U-C-A-G-U-G-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 ucaguguccu gaugaggccg uuaggccgaa igucccuu

RN 337387-96-9 CAPLUS

CN RNA, (U-G-C-U-C-C-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-U-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ugcuccugcu gaugaggccg uuaggccgaa igucauca

RN 337388-08-6 CAPLUS

CN RNA, (A-G-A-A-G-G-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-C-C-G) (9CI) (CA INDEX NAME)

SEQ 1 agaaggugcu gaugaggccg uuaggccgaa igcuuccg

RN 337388-37-1 CAPLUS

CN RNA, (U-U-C-C-G-C-A-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 uuccgcagcu gaugaggccg uuaggccgaa igcugggg

RN 337388-72-4 CAPLUS

CN RNA, (G-A-U-G-G-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-U-U-U) (9CI) (CA INDEX NAME)

SEQ 1 gaugguuucu gaugaggccg uuaggccgaa iguuuuuu

RN 337388-74-6 CAPLUS

CN RNA, (G-G-A-G-C-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ggagcggacu gaugaggccg uuaggccgaa iguuuugg

RN 337388-88-2 CAPLUS

CN RNA, (U-U-G-U-C-U-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-C-A-A) (9CI) (CA INDEX NAME)

SEQ 1 uugucugacu gaugaggccg uuaggccgaa iguuucaa

RN 337389-08-9 CAPLUS

CN RNA, (C-C-A-U-C-C-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-G-G-C-A) (9CI) (CA INDEX NAME)

SEQ 1 ccauccaccu gaugaggccg uuaggccgaa igccggca

RN 337389-12-5 CAPLUS

CN RNA, (C-U-U-C-U-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-A-G-C) (9CI) (CA INDEX NAME)

SEQ 1 cuucuucucu gaugaggccg uuaggccgaa iguuaagc

RN 337389-24-9 CAPLUS

CN RNA, (G-C-C-A-A-G-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-U-C-U) (9CI) (CA INDEX NAME)

SEQ 1 gccaauguucu gaugaggccg uuaggccgaa igcuuucu

RN 337389-27-2 CAPLUS
CN RNA, (U-G-C-C-A-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-A-G-U) (9CI) (CA INDEX NAME)

SEQ 1 ugccagcacu gaugaggccg uuaggccgaa igccaagu

RN 337389-41-0 CAPLUS
CN RNA, (U-U-G-U-U-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-U-U-U) (9CI) (CA INDEX NAME)

SEQ 1 uuguuggacu gaugaggccg uuaggccgaa iguuguuu

RN 337389-46-5 CAPLUS
CN RNA, (C-U-C-G-G-U-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-U-U-G) (9CI) (CA INDEX NAME)

SEQ 1 cucggucacu gaugaggccg uuaggccgaa iguuguug

RN 337389-71-6 CAPLUS
CN RNA, (G-U-C-A-A-G-C-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-A-A-G-A) (9CI) (CA INDEX NAME)

SEQ 1 gucaagcacu gaugaggccg uuaggccgaa igccaaga

RN 337389-76-1 CAPLUS
CN RNA, (A-A-G-A-A-C-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-U-G-U-U-C) (9CI) (CA INDEX NAME)

SEQ 1 aagaacggcu gaugaggccg uuaggccgaa iguuuguc

RN 337389-95-4 CAPLUS
CN RNA, (G-G-U-A-C-A-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 gguacaugcu gaugaggccg uuaggccgaa igucccca

RN 337390-03-1 CAPLUS
CN RNA, (A-C-U-G-C-U-U-U-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-C-C-U-U) (9CI) (CA INDEX NAME)

SEQ 1 acugcuugcu gaugaggccg uuaggccgaa iguuccuu

RN 337390-26-8 CAPLUS

CN RNA, (G-A-A-G-G-U-C-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-G-U-G-A) (9CI) (CA INDEX NAME)

SEQ 1 gaaggucccu gaugaggccg uuaggccgaa igucguga

RN 337390-28-0 CAPLUS

CN RNA, (C-C-C-A-C-A-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-C-U-G-G) (9CI) (CA INDEX NAME)

SEQ 1 cccacagacu gaugaggccg uuaggccgaa iguccugg

RN 337390-43-9 CAPLUS

CN RNA, (G-A-C-G-C-C-A-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-C-C) (9CI) (CA INDEX NAME)

SEQ 1 gacgccaucu gaugaggccg uuaggccgaa igcccacc

RN 337390-50-8 CAPLUS

CN RNA, (U-C-A-A-A-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-C-C-C) (9CI) (CA INDEX NAME)

SEQ 1 ucaaauggcu gaugaggccg uuaggccgaa igcugccc

RN 337390-73-5 CAPLUS

CN RNA, (U-G-G-G-U-G-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-A-U-C-A) (9CI) (CA INDEX NAME)

SEQ 1 uggguguucu gaugaggccg uuaggccgaa igucauca

RN 337390-79-1 CAPLUS

CN RNA, (C-A-G-C-C-G-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-U) (9CI) (CA INDEX NAME)

SEQ 1 cagccgcucu gaugaggccg uuaggccgaa igcugggu

RN 337390-83-7 CAPLUS

CN RNA, (U-C-C-C-C-C-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-C-A-C-A) (9CI) (CA INDEX NAME)

SEQ 1 uccccuccu gaugaggccg uuaggccgaa igcccaca

RN 337390-95-1 CAPLUS

CN RNA, (U-U-G-A-A-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-A-U) (9CI) (CA INDEX NAME)

SEQ 1 uugaauggcu gaugaggccg uuaggccgaa igcuggau

RN 337391-00-1 CAPLUS

CN RNA, (C-A-C-A-C-U-U-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-U-G-A-A) (9CI) (CA INDEX NAME)

SEQ 1 cacacuuucu gaugaggccg uuaggccgaa igcuugaa

RN 337391-11-4 CAPLUS

CN RNA, (G-U-U-A-A-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-U-C-C) (9CI) (CA INDEX NAME)

SEQ 1 guuaagaccu gaugaggccg uuaggccgaa igcugucc

RN 337391-23-8 CAPLUS

CN RNA, (A-A-U-C-A-G-A-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-C-U-A-U-G) (9CI) (CA INDEX NAME)

SEQ 1 aaucagaccu gaugaggccg uuaggccgaa igucuaug

RN 337391-28-3 CAPLUS

CN RNA, (C-A-A-A-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-A-C-A) (9CI) (CA INDEX NAME)

SEQ 1 caaacuggcu gaugaggccg uuaggccgaa iguugaca

RN 337391-53-4 CAPLUS

CN RNA, (A-G-G-G-C-U-G-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 agggcuggcu gaugaggccg uuaggccgaa igcugggg

RN 337391-58-9 CAPLUS
CN RNA, (U-G-C-G-G-G-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-U-G-G-G-G) (9CI) (CA INDEX NAME)

SEQ 1 ugcggggacu gaugaggccg uuaggccgaa igcugggg

RN 337391-67-0 CAPLUS
CN RNA, (A-A-A-U-U-U-U-A-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-A-A-G-G) (9CI) (CA INDEX NAME)

SEQ 1 aaauuuuacu gaugaggccg uuaggccgaa iguuaagg

RN 337391-70-5 CAPLUS
CN RNA, (A-C-A-A-G-C-C-G-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-U-A-A) (9CI) (CA INDEX NAME)

SEQ 1 acaagccgcu gaugaggccg uuaggccgaa igccuuaa

RN 337391-76-1 CAPLUS
CN RNA, (C-A-A-U-U-U-U-C-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-C-C-U-C-C-A) (9CI) (CA INDEX NAME)

SEQ 1 caauuuuccu gaugaggccg uuaggccgaa igccucca

RN 337391-88-5 CAPLUS
CN RNA, (A-A-U-G-U-U-C-U-C-U-G-A-U-G-A-G-G-C-C-G-U-U-A-G-G-C-C-G-A-A-I-G-U-U-G-U-A-A) (9CI) (CA INDEX NAME)

SEQ 1 aauguucucu gaugaggccg uuaggccgaa iguuguuaa

L47 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:168136 CAPLUS
DOCUMENT NUMBER: 134:233606
TITLE: Nucleic acid-based ribozyme and DNazyme modulators of gene expression
INVENTOR(S): McSwiggen, James; Usman, Nassim; Blatt, Lawrence; Beigelman, Leonid; Burgin, Alex; Karpeisky, Alexander; Matulic-Adamic, Jasenka; Sweedler, David; Draper, Kenneth; Chowrira, Bharat; Stinchcomb, Dan; Beaudry, Amber; Zinnen, Shawn; Lugwig, Janos; Sproat, Brian S.
PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 717 pp.

CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|----------|
| WO 2001016312 A2 | | 20010308 | WO 2000-US23998 | 20000830 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG | | | |
| RW: | AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-PV151713 | 19990831 |
| | | | US 1999-406643 | 19990927 |
| | | | US 1999-PV156467 | 19990927 |
| | | | US 1999-PV156236 | 19990927 |
| | | | US 1999-436430 | 19991108 |
| | | | US 1999-PV169100 | 19991206 |
| | | | US 1999-PV173612 | 19991229 |
| | | | US 1999-474432 | 19991229 |
| | | | US 1999-476387 | 19991230 |
| | | | US 2000-498824 | 20000204 |
| | | | US 2000-531025 | 20000320 |
| | | | US 2000-PV197769 | 20000414 |
| | | | US 2000-578223 | 20000523 |

OTHER SOURCE(S): MARPAT 134:233606

ED Entered STN: 09 Mar 2001

AB Novel nucleic acid mols. useful as inhibitors of gene expression, compns., and methods for their use are provided. The invention features novel nucleic acid-based techniques (e.g., enzymic nucleic acid mols. (ribozymes), antisense nucleic acids, 2-5A antisense chimeras, triplex DNA, and antisense nucleic acids containing RNA-cleaving chemical groups) and their use to modulate the expression of mol. targets impacting the development and progression of cancers, diabetes, obesity, Alzheimer's disease diseases, age-related diseases, and/or hepatitis B infections and related conditions. Catalytic nucleic acids were designed for site-specific cleavage of human mRNA targets encoding protein tyrosine phosphatase 1b, methionine aminopeptidase, β -secretase, presenilin-1, epidermal growth factor receptor-2 (HER2/c-erb2/neu), phospholamban, telomerase, and hepatitis B virus genes. Methods for chemical synthesis of modified nucleoside triphosphates (NTPs) and RNA polymerase-catalyzed incorporation of modified NTPs into catalytic oligonucleotides are also provided. [This abstract record os one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 329986-64-3P

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (NCH-Xylo ribozyme specific for Her2; nucleic acid-based ribozyme and DNzyme modulators of gene expression)

RN 329986-64-3 CAPLUS

CN RNA, (Um-Cm-Um-Cm-Cm-Am-Um-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am- β -D-xylo-I-Gm-Um-Cm-Cm-Cm-Um-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
 (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 329985-95-7P 329986-13-2P 329986-16-5P
329986-19-8P 329986-20-1P

RL: BAC (Biological activity or effector, except adverse); BPN
(Biosynthetic preparation); BSU (Biological study, unclassified); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)
(ribozyme specific for Her2; nucleic acid-based ribozyme and DNzyme
modulators of gene expression)

RN 329985-95-7 CAPLUS

CN RNA, (Gm-sp-Cm-sp-Am-sp-Cm-sp-Um-Cm-Cm-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-
Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Cm-Cm-Cm-Cm-Gm-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 329986-13-2 CAPLUS

CN RNA, (Um-sp-Am-sp-Am-sp-Gm-sp-Gm-Um-Um-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-
Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Cm-Cm-Cm-Cm-Am-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 329986-16-5 CAPLUS

CN RNA, (Cm-sp-Am-sp-Um-sp-Cm-sp-Gm-Um-Am-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-
Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Um-Um-Gm-Gm-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 329986-19-8 CAPLUS

CN RNA, (Am-sp-Gm-sp-Gm-sp-Gm-sp-Cm-Um-Gm-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-
Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Cm-Am-Um-Gm-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 329986-20-1 CAPLUS

CN RNA, (Cm-sp-Um-sp-Gm-sp-Um-sp-Am-Gm-Am-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-
Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Cm-Um-Gm-Gm-Gm-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 329986-84-7P 329986-90-5P 329987-47-5P
329987-74-8P 329987-80-6P 329988-41-2P

RL: BAC (Biological activity or effector, except adverse); BPN
(Biosynthetic preparation); BSU (Biological study, unclassified); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)
(ribozyme specific for hepatitis B virus; nucleic acid-based ribozyme
and DNzyme modulators of gene expression)

RN 329986-84-7 CAPLUS

CN RNA, (Cm-sp-Am-sp-Gm-sp-Um-sp-Gm-Gm-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-Um-
G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Um-Gm-Cm-
(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

NTE modified

SEQ 1 caguggcuga ugaggccguu aggccgaaig uugcx

RN 329986-90-5 CAPLUS

CN RNA, (Gm-sp-Cm-sp-Cm-sp-Um-sp-Cm-Am-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Cm-Gm-Gm-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

NTE modified

SEQ 1 gccucacuga ugaggccguu aggccgaaig ucggx

RN 329987-47-5 CAPLUS

CN RNA, (Am-sp-Gm-sp-Cm-sp-Um-sp-Um-Gm-Gm-Cm-[2'-deoxy-2'-(2-propenyl)]U-G-A-Um-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Cm-Um-Um-Gm-Am-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI)
(CA INDEX NAME)

NTE modified

SEQ 1 agcuuggcug augaggccgu uaggccgaaig gcuugax

RN 329987-74-8 CAPLUS

CN RNA, (Cm-sp-Am-sp-Gm-sp-Um-sp-Gm-Gm-Cm-(2'-amino-2'-deoxy)U-G-A-(2'-amino-2'-deoxy)U-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Um-Gm-Cm-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 caguggcuga ugaggccguu aggccgaaig uugcx

RN 329987-80-6 CAPLUS

CN RNA, (Gm-sp-Cm-sp-Cm-sp-Um-sp-Cm-Am-Cm-(2'-amino-2'-deoxy)U-G-A-(2'-amino-2'-deoxy)U-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Um-Cm-Gm-Gm-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 gccucacuga ugaggccguu aggccgaaig ucggx

RN 329988-41-2 CAPLUS

CN RNA, (Am-sp-Gm-sp-Cm-sp-Um-sp-Um-Gm-Gm-Cm-(2'-amino-2'-deoxy)U-G-A-(2'-amino-2'-deoxy)U-G-Am-Gm-Gm-Cm-Cm-Gm-Um-Um-Am-Gm-Gm-Cm-Cm-G-Am-Am-I-Gm-Cm-Um-Um-Gm-Am-(3'→3')-[(1'ξ)-1'-de(6-amino-9H-purin-9-yl)-1'-hydroxy]dA) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 agcuuggcug augaggccgu uaggccgaai gcuugax

L47 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:38156 CAPLUS

DOCUMENT NUMBER: 128:137156

TITLE: Oligonucleotide primers/probes derived from gene for nonstructural protein NS3 for detecting hepatitis GB virus C

INVENTOR(S): Yamaguchi, Kenjiro; Matsunaga, Yuka; Yagi, Shintaro; Hasegawa, Akira

PATENT ASSIGNEE(S): Tonen Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| JP 10004971 | A2 | 19980113 | JP 1996-164443 | 19960625 |
| PRIORITY APPLN. INFO.: | | | JP 1996-164443 | 19960625 |
| ED Entered STN: 23 Jan 1998 | | | | |
| AB Five gene fragments encoding nonstructural protein NS3 are isolated from 5 Japanese patients infected with hepatitis GB virus C by using the primers derived from the NS3-encoding genes isolated by Simon et al. From these gene fragments 8 oligonucleotide primers/probes are designed for the detection of GBV-C genes. | | | | |
| IT 202076-35-5P | | | | |
| RL: SPN (Synthetic preparation); THU (Therapeutic use) ; BIOL (Biological study); PREP (Preparation); USES (Uses) (oligonucleotide primers/probes derived from gene for nonstructural protein NS3 for detecting hepatitis GB virus C) | | | | |
| RN 202076-35-5 CAPLUS | | | | |
| CN DNA, d(A-G-G-C-G-G-A-G-T-G-Y-G-A-G-I-G-I-C-T-I-G-C) (9CI) (CA INDEX NAME) | | | | |
| NTE singlestranded | | | | |
| SEQ 1 aggcggagtg ygagigicti gc | | | | |

L47 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:31321 CAPLUS

DOCUMENT NUMBER: 128:98548

TITLE: Modulation of tetraplex formation by chemical modifications of a G4-containing oligonucleotide

INVENTOR(S): Wolfe, Jia Liu; Goodchild, John

PATENT ASSIGNEE(S): Hybridon, Inc., USA; Wolfe, Jia Liu; Goodchild, John

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| WO 9748715 | A1 | 19971224 | WO 1997-US9842 | 19970609 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9733795 | A1 | 19980107 | AU 1997-33795 | 19970609 |
| PRIORITY APPLN. INFO.: | | | US 1996-20954P | P 19960619 |
| | | | WO 1997-US9842 | W 19970609 |
| ED | Entered STN: 19 Jan 1998 | | | |
| AB | This invention provides oligonucleotides having a region of four or more G nucleotides at or near their 5' end and in which from one to all of the 5'-most nucleotides bears a 2' substituent, preferably methoxy, the 3'-terminal nucleotide of the oligonucleotide bears a hydrophobic moiety, preferably cholesterol, or both the 3'-terminal nucleotide bears a hydrophobic moiety and the 5'-most nucleotides are 2'-substituted. Both attachment of a hydrophobic moiety to the 3'-terminal nucleotide of the oligonucleotide and 2'-substitution at the 5'-end results in increased tetraplex stability. The presence of these Hoogsteen base-paired G-quartet structures, however, does not hamper their ability to recognize and form Watson-Crick base-paired duplexes with complementary oligonucleotides. Accordingly, the invention also provides methods of using the disclosed oligonucleotides for nucleic acid expression inhibition. | | | |
| IT | 178967-34-5 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (modulation of tetraplex formation by chemical modifications of G4-containing oligonucleotide) | | | |
| RN | 178967-34-5 CAPLUS | | | |
| CN | DNA, d(P-thio)(rUm-rGm-G-I-G-C-T-T-A-C-C-T-T-G-C-G-rAm-rAm-rCm-rAm) (9CI) (CA INDEX NAME) | | | |
| NTE | singlestranded modified | | | |
| SEQ | 1 uggigcttac cttgcgaaca | | | |

L47 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:1593 CAPLUS
 DOCUMENT NUMBER: 128:87864
 TITLE: Oligonucleotide probes for genotyping the HLA DQB1 gene and for HLA typing
 INVENTOR(S): Mougin, Bruno
 PATENT ASSIGNEE(S): Bio Merieux, Fr.; Mougin, Bruno
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9746700 | A1 | 19971211 | WO 1997-FR980 | 19970603 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| FR 2749308 | A1 | 19971205 | FR 1996-6822 | 19960603 |
| FR 2749308 | B1 | 19980724 | | |
| CA 2257182 | AA | 19971211 | CA 1997-2257182 | 19970603 |
| EP 910667 | A1 | 19990428 | EP 1997-927226 | 19970603 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2000511430 | T2 | 20000905 | JP 1998-500276 | 19970603 |
| PRIORITY APPLN. INFO.: | | | FR 1996-6822 | A 19960603 |
| | | | WO 1997-FR980 | W 19970603 |

ED Entered STN: 02 Jan 1998

AB Oligonucleotide probes for determination of genotypes at the HLA-DQB1 locus and so for determination of HLA-DQB1 type are described. All of the probes are designed to be useful at a single hybridization temperature (37°).

IT 200820-25-3
RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(probe determination of HLA DQB1 genotype; oligonucleotide probes for genotyping HLA DQB1 gene and for HLA typing)

RN 200820-25-3 CAPLUS

CN DNA, d(G-G-G-G-I-G-I-C-C-T-I-A-C-G-I-C-G-A-G-T-A-C-T) (9CI) (CA INDEX NAME)

NTE singlestranded

SEQ 1 ggggigicct iacgicgagt act

L47 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:772188 CAPLUS

DOCUMENT NUMBER: 128:31091

TITLE: Poliovirus-specific primers and methods of detection utilizing the same

INVENTOR(S): Kilpatrick, David R.

PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA

SOURCE: U.S., 22 pp., Cont.-in-part of U.S. 5,585,477.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5691134 | A | 19971125 | US 1994-273474 | 19940711 |
| US 5585477 | A | 19961217 | US 1993-92110 | 19930713 |
| US 6143494 | A | 20001107 | US 1997-935100 | 19970925 |
| PRIORITY APPLN. INFO.: | | | US 1993-92110 | A2 19930713 |
| | | | US 1994-273474 | A1 19940711 |

ED Entered STN: 11 Dec 1997

AB The ability to rapidly detect wild polioviruses in clin. specimens is a major concern for the world-wide eradication of polioviruses. Provided is a method of detecting polioviruses of all 3 serotypes from viral isolates of clin. specimens using a pair of degenerate PCR primers. This primer set, which uses deoxyinosine residues to compensate for third position mismatches at specific positions, recognizes nucleotide sequences near the receptor binding site of polioviruses. These sequences are unique to polioviruses and are absolutely conserved at the amino acid level. As a result, these PCR primers do not recognize nonpoliovirus enteroviruses. All poliovirus serotypes (40 poliovaccine related genotypes and 120 wild poliovirus genotypes from around the world) tested pos. All 14 prototype strains of nonpoliovirus enteroviruses tested neg. Also provided is a series of degenerate PCR primers that differentiates between the 3 wild poliovirus serotypes and a method of detecting the presence of the 3 serotypes utilizing a nucleic acid amplification technique.

IT 163584-34-7
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PCR primer Sero 3aP3; poliovirus specific primers and methods of detection utilizing the same)

RN 163584-34-7 CAPLUS

CN DNA, d(A-R-I-G-C-I-C-Y-Y-T-G-I-G-C-I-A-C-I-T-C) (9CI) (CA INDEX NAME)

NTE singlestranded

SEQ 1 arigcicyt gigciacitc

L47 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:625604 CAPLUS

DOCUMENT NUMBER: 127:289115

TITLE: Optimized antisense oligonucleotides exhibiting anti-cytomegalovirus activity

INVENTOR(S): Pari, Gregory S.

PATENT ASSIGNEE(S): Hybridon, Inc., USA

SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 9733992 | A1 | 19970918 | WO 1997-US4235 | 19970314 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9722150 | A1 | 19971001 | AU 1997-22150 | 19970314 |
| PRIORITY APPLN. INFO.: | | | US 1996-615801 | A 19960314 |
| | | | WO 1997-US4235 | W 19970314 |

ED Entered STN: 01 Oct 1997

AB Provided are novel, chemical modified antisense oligonucleotides with improved activities against human cytomegalovirus (HCMV). The modified oligonucleotides also possess enhanced stability, bio-availability, and reduced toxicity, which render them particularly suitable for clin. use. Modified oligonucleotides UL36/37 2x4 OMe and UL36/37 4x4 OMe inhibited 100% HCMV at 0.1 μ M, or >90% at 0.03 μ M, by targeting gene UL36/37. The present invention further provides therapeutic compns. comprising the novel oligonucleotides of the invention, and method of preparing medicaments comprising them.

IT **178967-34-5P**
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(antisense oligonucleotide UL36/37 2x4 OMe(I); optimized antisense oligonucleotides exhibiting anti-cytomegalovirus activity)

RN 178967-34-5 CAPLUS

CN DNA, d(P-thio)(rUm-rGm-G-I-G-C-T-T-A-C-C-T-T-G-C-G-rAm-rAm-rCm-rAm) (9CI) (CA INDEX NAME)

NTE singlestranded
modified

SEQ 1 uggigcttac cttgcgaaca

L47 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:135093 CAPLUS

DOCUMENT NUMBER: 126:248169

TITLE: Effect of Structural Modifications on the Activity of the Leadzyme

AUTHOR(S): Chartrand, Pascal; Usman, Nassim; Cedergren, Robert

CORPORATE SOURCE: Departement de Biochimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can.

SOURCE: Biochemistry (1997), 36(11), 3145-3150
CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 01 Mar 1997

AB The structure/function properties of functional groups in the leadzyme have been studied by assaying the activity of analog ribozymes generated by the systematic substitution of modified nucleotides in the internal loop region of the ribozyme. Guanosine analogs introduced at positions 4 and 7 occupied by guanosine in the wild-type mol. severely diminished cleavage. The substitution of deoxycytidine for cytidine at the cleavage site completely eliminated the activity of the leadzyme, as expected if the adjacent 2'-OH were the nucleophile in the cleavage reaction. Substitution of an abasic nucleotide for adenosine at position 8 did not affect the activity of the ribozyme. An anal. of the activity of these analogs gives rise to the proposal of a triple-base pair motif implicating C1, G4, and G7.

IT **188598-25-6**
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(effect of structural modifications on activity of leadzyme)

RN 188598-25-6 CAPLUS

CN RNA, (A-C-A-G-A-C-U-G-G-G-dI-G-U-C-A-C-G) (9CI) (CA INDEX NAME)

NTE singlestranded
modified

SEQ 1 acagacuggg igucacg

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:235616 CAPLUS

DOCUMENT NUMBER: 124:308722

TITLE: HSP60 gene sequences as universal targets for
microbial species identification: Studies with
coagulase-negative staphylococci

AUTHOR(S): Goh, Swee Han; Potter, Sheila; Wood, Julian O.;
Hemmingsen, Sean M.; Reynolds, Robert P.; Chow,
Anthony W.

CORPORATE SOURCE: Departments Medicine, University British Columbia,
Vancouver, BC, Can.

SOURCE: Journal of Clinical Microbiology (1996), 34(4), 818-23
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 20 Apr 1996

AB A set of universal degenerate primers which amplified, by PCR, a 600-bp oligomer encoding a portion of the 60-kDa heat shock protein (HSP60) of both *Staphylococcus aureus* and *Staphylococcus epidermidis* were developed. However, when used as a DNA probe, the 600-bp PCR product generated from *S. epidermidis* failed to cross-hybridize under high-stringency conditions with the genomic DNA of *S. aureus* and vice versa. To investigate whether species-specific sequences might exist within the highly conserved HSP60 genes among different staphylococci, digoxigenin-labeled HSP60 probes generated by the degenerate HSP60 primers were prepared from the six most commonly isolated *Staphylococcus* species (*S. aureus* 8325-4, *S. epidermidis* 9759, *S. haemolyticus* ATCC 29970, *S. schleiferi* ATCC 43808, *S. saprophyticus* KL122, and *S. lugdunensis* CRSN 850412). These probes were used for dot blot hybridization with genomic DNA of 58 reference and clin. isolates of *Staphylococcus* and non-*Staphylococcus* species. These six *Staphylococcus* species HSP60 probes correctly identified the entire set of staphylococcal isolates. The species specificity of these HSP60 probes was further demonstrated by dot blot hybridization with PCR-amplified DNA from mixed cultures of different *Staphylococcus* species and by the partial DNA sequences of these probes. In addition, sequence homol. searches of the NCBI BLAST databases with these partial HSP60 DNA sequences yielded the highest matching scores for both *S. epidermidis* and *S. aureus* with the corresponding species-specified probes. Finally, the HSP60 degenerate primers were shown to amplify an anticipated 600-bp PCR product from all 29 *Staphylococcus* species and from all but 2 of 30 other microbial species, including various gram-pos. and gram-neg. bacteria, mycobacteria, and fungi. These preliminary data suggest the presence of species-specific sequence variation within the highly conserved HSP60 genes of staphylococci. Further work is required to determine whether these degenerate HSP60 primers may be exploited for species-specific microbial identification and phylogenetic investigation of staphylococci and perhaps other microorganisms in general.

IT 176229-76-8

RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic

use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PCR primer H279; HSP60 gene sequence PCR for identification of
 coagulase-neg. staphylococci and other microbes)

RN 176229-76-8 CAPLUS

CN DNA, d(G-A-A-T-T-C-G-A-I-I-I-I-G-C-I-G-G-I-G-A-Y-G-G-I-A-C-I-A-C-I-A-C)
 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 176229-77-9

RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic
 use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PCR primer H280; HSP60 gene sequence PCR for identification of
 coagulase-neg. staphylococci and other microbes)

RN 176229-77-9 CAPLUS

CN DNA, d(C-G-C-G-G-G-A-T-C-C-Y-K-I-Y-K-I-T-C-I-C-C-R-A-A-I-C-C-I-G-G-I-G-C-Y-
 T-T) (9CI) (CA INDEX NAME)

NTE singlestranded

SEQ 1 cgcgggatcc ykiykitcic craaiccigg igcytt

L47 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:589449 CAPLUS

DOCUMENT NUMBER: 123:2724

TITLE: Poliovirus specific primers and methods of detection
 utilizing the same

INVENTOR(S): Kilpatrick, David R.

PATENT ASSIGNEE(S): United States of America, USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| WO 9502704 | A2 | 19950126 | WO 1994-US7881 | 19940711 |
| WO 9502704 | A3 | 19950309 | | |

W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE,
 HU, JP, KE, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO,
 NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
 BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

| | | | | |
|------------|---|----------|---------------|----------|
| US 5585477 | A | 19961217 | US 1993-92110 | 19930713 |
|------------|---|----------|---------------|----------|

| | | | | |
|------------|----|----------|-----------------|----------|
| CA 2167209 | AA | 19950126 | CA 1994-2167209 | 19940711 |
|------------|----|----------|-----------------|----------|

| | | | | |
|------------|----|----------|---------------|----------|
| AU 9473324 | A1 | 19950213 | AU 1994-73324 | 19940711 |
|------------|----|----------|---------------|----------|

| | | | | |
|-----------|----|----------|--|--|
| AU 693465 | B2 | 19980702 | | |
|-----------|----|----------|--|--|

| | | | | |
|-------------|----|----------|----------------|----------|
| JP 09500530 | T2 | 19970121 | JP 1994-504703 | 19940711 |
|-------------|----|----------|----------------|----------|

| | | | | |
|-----------|----|----------|----------------|----------|
| EP 789782 | A2 | 19970820 | EP 1994-923465 | 19940711 |
|-----------|----|----------|----------------|----------|

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1993-92110 A 19930713

WO 1994-US7881 W 19940711

ED Entered STN: 06 Jun 1995

AB The ability to rapidly detect wild polioviruses in clin. specimens is a
 major concern for the worldwide eradication of polioviruses. Provided is
 a method of detecting polioviruses of all 3 serotypes from viral isolates

of clin. specimens using a pair of degenerate PCR primers. This primer set, which uses deoxyinosine residues to compensate for third position mismatches at specific positions, recognizes nucleotide sequences near the receptor binding site of polioviruses. These sequences are unique to polioviruses and are absolutely conserved at the amino acid level. As a result, these PCR primers do not recognize nonpoliovirus enteroviruses. All poliovirus serotypes (40 polio vaccine related genotypes and 120 wild poliovirus genotypes from around the world) tested pos. All 14 prototype strains of nonpoliovirus enteroviruses tested neg. Also provided is a series of degenerate PCR primers that differentiates between the 3 wild poliovirus serotypes and a method of detecting the presence of the 3 serotypes utilizing a nucleic acid amplification technique.

IT 163584-34-7

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(PCR primer Sero 3aP3; poliovirus specific primers and methods of detection utilizing the same)

RN 163584-34-7 CAPLUS

CN DNA, d(A-R-I-G-C-I-C-Y-Y-T-G-I-G-C-I-A-C-I-T-C) (9CI) (CA INDEX NAME)

NTE singlestranded

SEQ 1 arigcicyyt gigciacitc

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